



The Economist

“Judge-mandering” and how to cure it

Singapore under new management

China Shock II

Gangs of Latin America

MAY 11TH-17TH 2024

THE NEW ECONOMIC ORDER



RICHARD MILLE *Cup*

CLASSIC YACHT RACING

- FALMOUTH
- DARTMOUTH
- COWES
- LE HAVRE

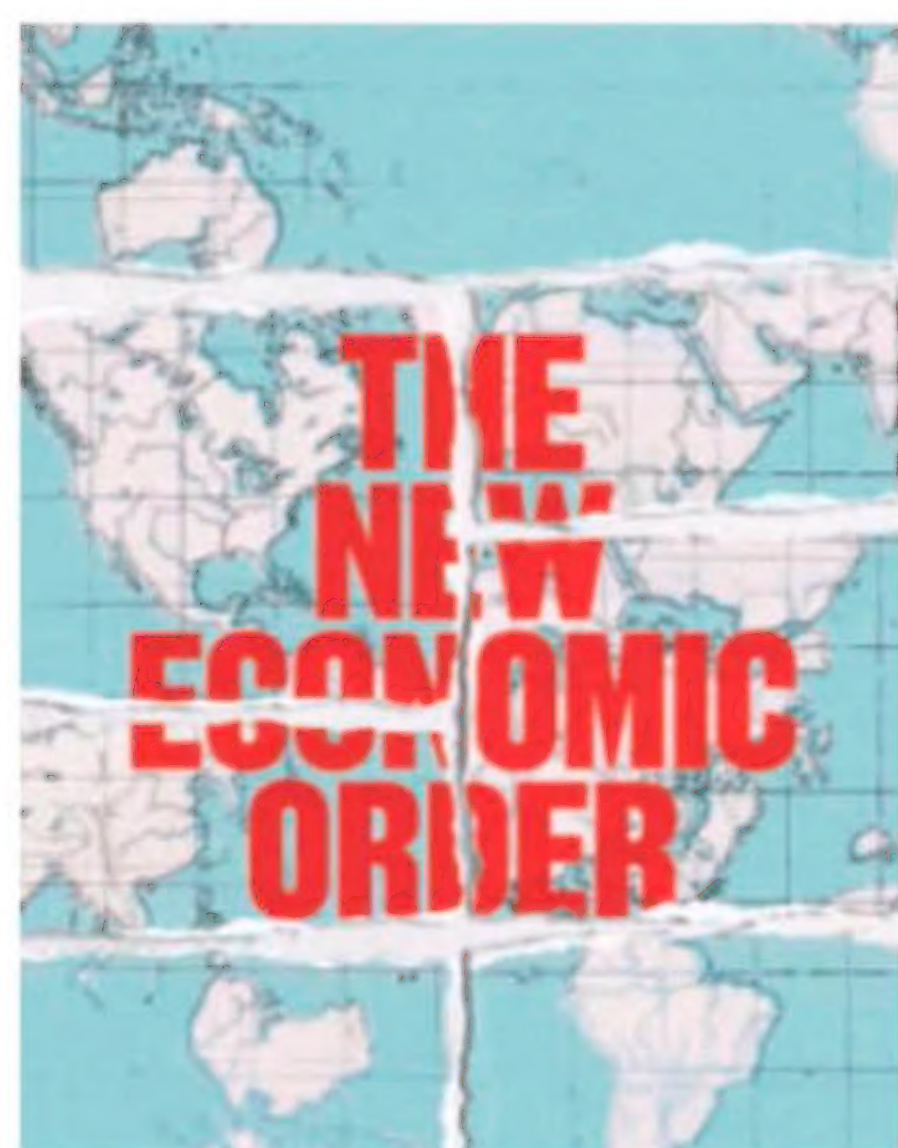


02.06.24

└ 15.06.24

RICHARDMILLECUP.COM

Contents



On the cover

The old economic order is coming apart: leader, *page 7*. Critics will miss it when it is gone: briefing, *page 13*. The financial system is more global than ever, yet it is at risk. A special report, *after page 38*. Human-rights lawyers are battling to save laws designed to tame rulers' most violent impulses, *page 49*

"Judge-mandering" and how to cure it Partisan judges are eroding Americans' trust in the law: leader, *page 8*, and analysis, *page 17*

Singapore under new management An improbable success story must evolve: leader, *page 8*, and analysis, *page 28*. An interview with Lawrence Wong, the incoming prime minister, *page 27*. In Malaysia, Indonesia and Singapore, Gaza is a very local problem: *Banyan*, *page 30*

China Shock II What Xi Jinping gets wrong about his country's economy, *page 58*. Visiting Europe for the first time in five years, China's president reminds the West of an old grievance, *page 32*

Gangs of Latin America Iron-fist tactics don't work against organised crime. And they lead to authoritarianism: leader, *page 10*. The world's most violent region needs a new approach, *page 23*

→ The digital element of your subscription means that you can search our archive, read all of our daily journalism and listen to audio versions of our stories. Visit [economist.com](https://www.economist.com)

The world this week

- 5 A summary of political and business news

Leaders

- 7 **Globalisation**
The new economic order
- 8 **American justice**
Stop "judge-mandering"
- 8 **Singapore**
Under new management
- 9 **European integration**
Risks and rewards
- 10 **Latin America's gangs**
Deadly violence
- 11 **British politics**
Labour woos business

Letters

- 12 On Britain's refugee policy, Reform UK, transmission markets, San Marino, Taylor Swift

Briefing

- 13 **Deglobalisation**
The great regression

Special report:
Deglobalisation of finance
Worlds apart
After page 38



Schumpeter China's e-commerce giant is no longer being stripped for parts. Good, *page 56*



United States

- 17 Bending justice
- 18 Donald Trump's trial
- 19 Tackling absenteeism
- 19 Kristi Noem's dog days
- 20 The estate-sales boom
- 21 Unionisation in the South
- 22 **Lexington** Class act in Milwaukee



The Americas

- 23 Defeating violent crime
- 26 When gangs rule



Asia

- 27 Meet Lawrence Wong
- 28 Singapore's economy
- 30 **Banyan** The war in Gaza
- 31 India's ports



China

- 32 Xi Jinping visits Europe
- 33 Fake Russian women
- 34 **Chaguan** To get rich is perilous



Middle East & Africa

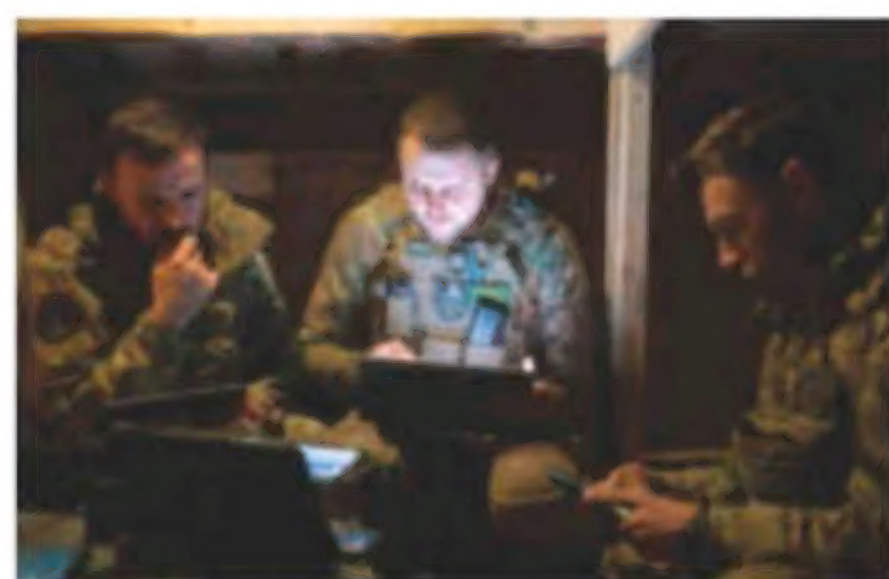
- 35 Gaza on the brink
- 36 Lousy Arab armies
- 37 America's struggle for influence in Africa



Contents

Europe

- 39 Ukraine digs in
- 41 Selling war trophies
- 41 Protests in Georgia
- 42 Romania's hard right
- 42 Israel at Eurovision
- 43 **Charlemagne** National days off



Britain

- 45 Labour and business
- 47 Angela Rayner
- 48 **Bagehot** Goodbye, 2019!



International

- 49 The rules-based order is cracking



Business

- 51 What grids can do for AI
- 52 What AI can do for grids
- 53 The war for talent
- 54 **Bartleby** CareerTok
- 55 Chatbots v Indian IT
- 56 **Schumpeter** Alibaba's comeback



Finance & economics

- 57 Chinese overcapacity
- 58 China's consumers
- 59 Ukrainian tax-dodging
- 60 Chocolate meltdown
- 61 European banks
- 62 **Buttonwood** Busy trading floors
- 63 **Free exchange** Weakening the dollar



Science & technology

- 64 Yamnaya culture
- 65 Blade runners
- 66 Crop spraying
- 67 Lunar exercise



Culture

- 68 The art world's secrets
- 69 Fighting death
- 70 Beethoven's 9th at 200
- 71 World in a dish: chillies
- 71 The National Gallery
- 72 Comedy in America



Economic & financial indicators

- 73 Statistics on 42 economies

Obituary

- 74 Anne Innis Dagg, the woman who loved giraffes

Volume 451 Number 9396

Published since September 1843 to take part in "a severe contest between intelligence, which presses forward, and an unworthy, timid ignorance obstructing our progress."

Editorial offices in London and also: Amsterdam, Beijing, Berlin, Brussels, Chicago, Dakar, Dallas, Dubai, Johannesburg, Madrid, Mexico City, Moscow, Mumbai, New Delhi, New York, Paris, San Francisco, São Paulo, Seoul, Shanghai, Singapore, Tokyo, Washington DC

Subscription service

For our full range of subscription offers, including digital only or print and digital bundled, visit: Economist.com/offers

If you are experiencing problems when trying to subscribe, please visit our Help pages at: www.economist.com/help for troubleshooting advice.

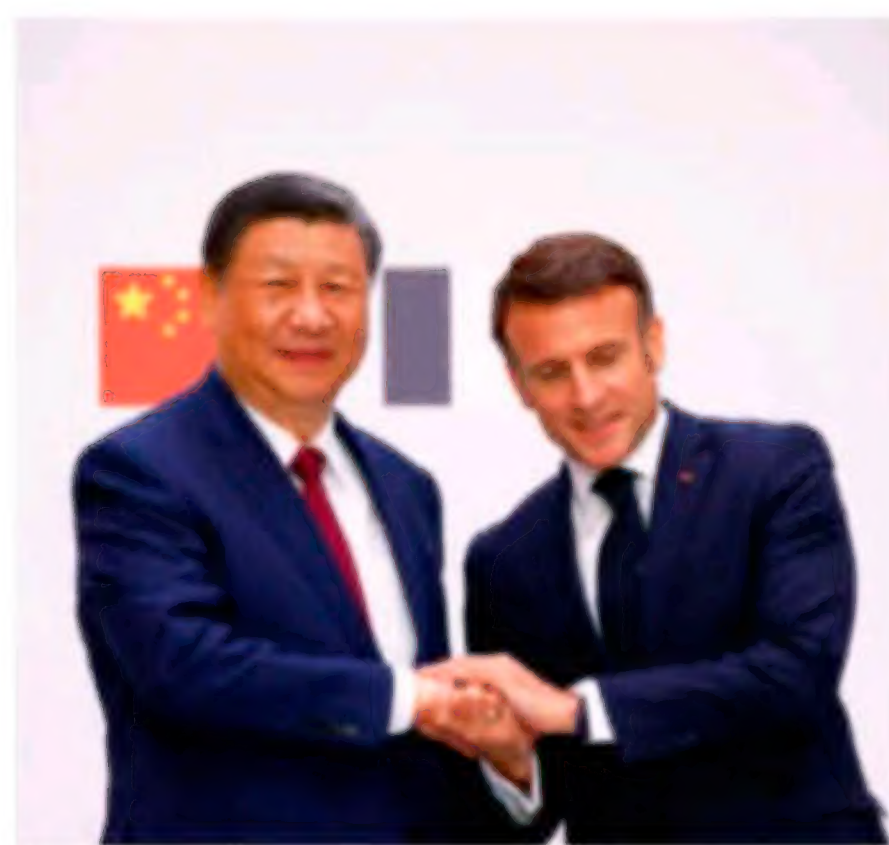
To manage your account online, please visit my.economist.com where you can also access our live chat service which is available 24/7. To call us, contact our dedicated service centre on:

North America: +1 888 815 0215
Latin America & Mexico: +1 646 248 5983



PEFC certified
This copy of *The Economist* is printed on paper sourced from sustainably managed forests certified by PEFC
www.pefc.org

The world this week Politics



For the first time in five years, **Xi Jinping** visited Europe. China's leader was welcomed by his French counterpart, Emmanuel Macron, who pressed him to help end the war in Ukraine and to establish a more balanced trade relationship. Mr Xi gave little ground. He then moved on to Serbia, where he commemorated the 25th anniversary of America's bombing of the Chinese embassy in Belgrade. "This we should never forget," he wrote in a piece for a Serbian newspaper. Mr Xi wrapped up his tour in Hungary, a member of the EU and NATO that is also a staunch supporter of China. Mr Xi praised its "independent" foreign policy.

Israel carried out air strikes on Rafah in southern **Gaza** and told 100,000 civilians to leave because it was planning to "operate" there. It took control of part of the Philadelphi corridor, a strip of land next to Egypt, as well as the Rafah crossing on the border with Egypt. Joe Biden said he would not supply Israel with the weapons that would be used in an attack on Rafah. Meanwhile, Israel temporarily closed Kerem Shalom, a commercial crossing into Gaza through which most humanitarian aid enters the strip, after four soldiers were killed in a rocket attack by Hamas.

Hamas announced that it would accept the terms of a **ceasefire** and hostage release. However, Israeli officials said the proposed deal was different from the earlier text that they had agreed to. Israel sent a delegation to Cairo for further negotiations.

Turkey announced that it would suspend trade with Israel, worth almost \$7bn a year, until there was a ceasefire and the free flow of humanitarian aid into Gaza.

Voting took place in **Chad's** presidential election, which is almost certain to be won by Mahamat Idriss Déby Itno. Mr Déby took power unconstitutionally in 2021 after the death of his father, who had ruled since 1990. Russian troops have reportedly arrived in Chad to protect the president, while America said it would withdraw its forces, which had been helping Chad and the wider region fight jihadists.

Security forces in **Libya** rescued at least 107 people who had been held captive and tortured while trying to make their way to Europe. Earlier this year the International Organisation for Migration reported that it had found a mass grave in Libya holding the bodies of at least 65 migrants.

Pakistan said that a suicide-bomb attack on a dam in March that killed five Chinese engineers had been carried out by an Afghan bomber, a claim denied by the Taliban government in **Afghanistan**, which wants to establish closer ties with China. Tensions between Pakistan and Afghanistan have risen in recent months. Shortly before the dam attack Pakistan carried out air strikes in Afghanistan targeting what it said was a militant group.

Every vote counts

Narendra Modi, **India's** prime minister, cast his vote in the third stage of the country's general election, which concludes on June 4th when the ballots will be tallied. Turnout so far has been slightly lower than in the election of 2019, which may be explained by a searing heatwave that has seen temperatures top 45°C (113°F).

In **Canada** three men were arrested and charged in connection with the murder of

Hardeep Singh Nijjar, a Sikh separatist, near Vancouver last June. India had described Singh as a terrorist. The three suspects are Indian nationals who were living in Edmonton. India's government denies any involvement in the killing.

Panama's presidential election was won by José Raúl Mulino. Mr Mulino was drafted in as the candidate of the right to replace Ricardo Martinelli, a former president, who was barred from running again because of an 11-year prison sentence for money-laundering. He is holed up in the Nicaraguan embassy, where he has claimed asylum. One of Mr Mulino's biggest tasks will be tackling corruption.



At least 100 people died in the worst flooding to hit the **Brazilian** state of Rio Grande do Sul in 80 years. More than 400,000 people lost electricity and nearly a third of the state's 11m people were without water.

Joe Biden condemned **anti-semitism** in a speech commemorating the Holocaust. The American president said that "too many people" are "denying, downplaying, rationalising, ignoring the horrors of the Holocaust and October 7th" and "already forgetting... that it was Hamas that brutalised Israelis". He also mentioned Jewish students at American colleges being "blocked, harassed, attacked while walking to class".

Mike Johnson, the Republican **speaker** of the House of Representatives, easily survived an attempt by party rebels led by Marjorie Taylor Greene, a

radical right-winger, to oust him from his job. Democrats joined the bulk of Republicans to defeat the motion 359 to 43.

Britain's ruling Conservative Party suffered heavy defeats in local elections. The opposition Labour Party was victorious in a parliamentary by-election held on the same day, with an impressive 26% swing from the Tories. A Conservative MP defected to Labour, the second to do so in two weeks. It is all grim news for Rishi Sunak, the prime minister, ahead of an election expected this autumn.

The Scottish National Party is also flailing. John Swinney assumed the party's leadership unopposed, and thus became **Scotland's** first minister, following the resignation of Humza Yousaf. Mr Swinney, a veteran politician, is seen as a safe pair of hands; he is the SNP's third leader in just over a year.

In the reign of the tsar

Vladimir Putin was sworn in for a fifth term as Russia's president, telling dignitaries at the ceremony that the recent election had "confirmed the correctness of the country's course". The day before the inauguration Mr Putin ordered the army to train for the deployment of tactical **nuclear weapons** in a military drill.

Ukraine's domestic-intelligence service claimed to have uncovered another plot to assassinate **Volodymyr Zelensky**, the country's president. It said two colonels in the State Protection Service, which provides security for the president, had been recruited by Russia and tasked with finding people to kill Mr Zelensky.

An **American soldier** was arrested in Russia, allegedly for stealing money from a woman he was having a relationship with. The soldier was on an unauthorised visit to Vladivostok, in Russia's far east. A growing number of Americans have been detained in Russia over the past few years.

The world this week Business



Disney reported that its Disney+ and Hulu streaming services had made a combined operating profit of \$47m in the three months ending March 30th, a huge improvement on the \$587m loss in the same quarter last year. The overall loss from streaming, including ESPN, in the recent quarter narrowed to just \$18m. To boost business Disney announced a new streaming bundle in America that will include programming from Warner Bros Discovery. But the lack of profitability at the streaming division remains a source of investor discontent. After the company dampened expectations for growth in the current quarter, its share price tumbled by nearly 10%.

By contrast, the stock of **UBS** leapt by 10% after it reported a quarterly net profit of \$1.8bn, well above market forecasts. The Swiss bank gained from soaring revenues at its wealth-management business and investment banking. It also lowered the estimate of losses it expects to incur from the toxic parts of the business it inherited from Credit Suisse.

Sweden's central bank cut its main interest rate by a quarter of a percentage point, to 3.75%, the first reduction in eight years. Central banks in the Czech Republic, Hungary and Switzerland have also been lowering rates and the European Central Bank is expected to follow suit on June 6th, as Europe's monetary policy diverges from America's.

American stockmarkets rallied after figures showed that employers had created 175,000

jobs in April, which was below forecasts, suggesting that the labour market is cooling. The data provide more support for those investors betting on interest-rate cuts.

AstraZeneca withdrew its covid-19 vaccine, one of the first to be rolled out during the pandemic, because it would be no longer commercially viable as updated jabs hit the market.

The new neural engine

Apple launched new iPads powered by its next-generation M4 chip, for artificial intelligence. Apple says the M4 is capable of up to 38trn operations per second, faster than the neural-processing unit of any PC with specific AI capabilities. Meanwhile, Apple reported revenue of \$90.8bn for the first three months of the year, down by 4% from the same quarter in 2023. Sales of the iPhone fell by 10%, to \$46bn.

Tesla's sales of cars it made in **China** dropped again, by 18% in April compared with April 2023, according to the China Passenger Car Association. That is despite a big rise in electric-vehicle sales in the same month. BYD sold the most pure-battery cars.

A weak yen helped boost **Toyota's** 12-month operating profit to ¥5.3trn (\$34bn). But the Japanese carmaker warned that it expects profit to fall by 20% this year as it steps up its spending on electric cars and artificial intelligence.

Attacks by Houthi rebels off the coast of Yemen are expanding farther offshore, warned A.P. Moller-Maersk, which forecast a 15-20% loss of capacity across the **shipping industry** on routes between the Far East and northern Europe and the Mediterranean this quarter. Vessels have been forced to make the long journey around South Africa rather than through the Suez Canal because of the risk. Last month the Houthis attacked a ship 600km (375 miles) out to sea.

TikTok filed its appeal against legislation that would ban its app in America unless it divests from ByteDance, its Chinese parent company, by January next year. TikTok says the ban is unlawful, and that it would be impossible to create a stand-alone app in the United States. On another front of the tech wars, America has reportedly rescinded the licences that allow Intel and Qualcomm to

export chips to **Huawei**, a Chinese maker of network equipment.

The launch of Boeing's first manned **Starliner** spacecraft was postponed because of a faulty oxygen relief valve on the rocket. The Starliner is contracted to NASA to ferry crew to the International Space Station. A new launch date has been rescheduled for May 17th at the earliest. In a less than stellar week for Boeing, the Federal Aviation Administration opened another investigation into the production of its passenger jets, this time the Dreamliner 787.

BS jobs

A leading venture-capital investor in Silicon Valley said that half of Google's white-collar employees do no "real work". David Ulevitch reckons that many could "probably be let go tomorrow" and the company wouldn't notice. He also bemoaned the "growing professional managerial class" in America as a "weakness, not a strength". Mr Ulevitch thinks the problem of "fake work" is widespread, and believes his comments were "one of the least controversial things I've ever said".



The new economic order

The liberal international system is slowly coming apart

AT FIRST GLANCE, the world economy looks reassuringly resilient. America has boomed even as its trade war with China has escalated. Germany has withstood the loss of Russian gas supplies without suffering an economic disaster. War in the Middle East has brought no oil shock. Missile-firing Houthi rebels have barely touched the global flow of goods. As a share of global GDP, trade has bounced back from the pandemic and is forecast to grow healthily this year.

Look deeper, though, and you see fragility. For years the order that has governed the global economy since the second world war has been eroded. Today it is close to collapse. A worrying number of triggers could set off a descent into anarchy, where might is right and war is once again the resort of great powers. Even if it never comes to conflict, the effect on the economy of a breakdown in norms could be fast and brutal.

As we report, the disintegration of the old order is visible everywhere (see Briefing). Sanctions are used four times as much as they were during the 1990s; America has recently imposed “secondary” penalties on entities that support Russia’s armies. A subsidy war is under way, as countries seek to copy China’s and America’s vast state backing for green manufacturing. Although the dollar remains dominant and emerging economies are more resilient, global capital flows are starting to fragment, as our special report explains.

The institutions that safeguarded the old system are either already defunct or fast losing credibility. The World Trade Organisation turns 30 next year, but will have spent more than five years in stasis, owing to American neglect. The IMF is gripped by an identity crisis, caught between a green agenda and ensuring financial stability. The UN security council is paralysed. And, as we report, supranational courts like the International Court of Justice are increasingly weaponised by warring parties (see International section). Last month American politicians including Mitch McConnell, the leader of Republicans in the Senate, threatened the International Criminal Court with sanctions if it issues arrest warrants for the leaders of Israel, which also stands accused of genocide by South Africa at the International Court of Justice.

So far fragmentation and decay have imposed a stealth tax on the global economy: perceptible, but only if you know where to look. Unfortunately, history shows that deeper, more chaotic collapses are possible—and can strike suddenly once the decline sets in. The first world war killed off a golden age of globalisation that many at the time assumed would last for ever. In the early 1930s, following the onset of the Depression and the Smoot-Hawley tariffs, America’s imports collapsed by 40% in just two years. In August 1971 Richard Nixon unexpectedly suspended the convertibility of dollars into gold; only 19 months later, the Bretton Woods system of fixed-exchange rates fell apart (see Free exchange).

Today a similar rupture feels all too imaginable. The return of Donald Trump to the White House, with his zero-sum worldview, would continue the erosion of institutions and

norms. The fear of a second wave of cheap Chinese imports could accelerate it (see Finance & economics). Outright war between America and China over Taiwan, or between the West and Russia, could cause an almighty collapse.

In many of these scenarios, the loss will be more profound than many people think. It is fashionable to criticise untrammelled globalisation as the cause of inequality, the global financial crisis and neglect of the climate. But the achievements of the 1990s and 2000s—the high point of liberal capitalism—are unmatched in history. Hundreds of millions escaped poverty in China as it integrated into the global economy. The infant-mortality rate worldwide is less than half what it was in 1990. The percentage of the global population killed by state-based conflicts hit a post-war low of 0.0002% in 2005; in 1972 it was nearly 40 times as high. The latest research shows that the era of the “Washington consensus”, which today’s leaders hope to replace, was one in which poor countries began to enjoy catch-up growth, closing the gap with the rich world.

The decline of the system threatens to slow that progress, or even throw it into reverse. Once broken, it is unlikely to be replaced by new rules. Instead, world affairs will descend into their natural state of anarchy that favours banditry and violence. Without trust and an institutional framework for co-operation, it will become harder for countries to deal with the 21st century’s challenges, from containing an arms race in artificial intelligence to collaborating in space. Problems will be tackled by clubs of like-minded countries. That can work, but will more often involve coercion and resentment, as with Europe’s carbon border-tariffs or China’s feud with the IMF. When co-operation gives way to strong-

arming, countries have less reason to keep the peace.

In the eyes of the Chinese Communist Party, Vladimir Putin or other cynics, a system in which might is right would be nothing new. They see the liberal order not as an enactment of lofty ideals but an exercise of raw American power—power that is now in relative decline.

Gradually, then suddenly

It is true that the system established after the second world war achieved a marriage between America’s internationalist principles and its strategic interests. Yet the liberal order also brought vast benefits to the rest of the world. Many of the world’s poor are already suffering from the inability of the IMF to resolve the sovereign-debt crisis that followed the covid-19 pandemic. Middle-income countries such as India and Indonesia hoping to trade their way to riches are exploiting opportunities created by the old order’s fragmentation, but will ultimately rely on the global economy staying integrated and predictable. And the prosperity of much of the developed world, especially small, open economies such as Britain and South Korea, depends utterly on trade. Buttressed by strong growth in America, it may seem as if the world economy can survive everything that is thrown at it. It can’t. ■



Bending the justice system

Stop judge-mandering

The rise of partisan judges is eroding Americans' trust in the law

WHEN MATTHEW KACSMARYK issued a ruling in April 2023 suspending the Food and Drug Administration's approval of mifepristone, an abortion pill, Democrats were furious. How could a lone judge in small-town Texas deprive millions of American women of a drug that has been deemed by doctors to be safer than Tylenol?

Mr Kacsmarky embodies a pressing problem in America's judiciary: partisan lawyers pinpointing an ideologically sympathetic judge to hear their case, who then blocks a policy for the entire country. Forum-shopping is as old as the law itself and was used enthusiastically by Democrats when Donald Trump was president, for example to block funding for his border wall. The practice of "judge-mandering" (a cousin of electoral gerrymandering) takes this to an extreme. It is a potent tool of Republicans seeking to stall President Joe Biden's agenda (see United States section).

The longer judge-mandering goes on, the more politicised America's judiciary will become—with dire consequences for the rule of law. Preliminary injunctions were once reserved for rare cases where plaintiffs would be harmed while litigation proceeded. They are now being used for rapid political retaliation.

Between 2000 and 2023 the share of Americans who said they trusted judges fell from 75% to 49%, according to Gallup, a pollster. Judge-mandering doesn't help. The problem is especially harmful to the Supreme Court. When lower-court judges issue incendiary rulings and appeals courts do not temper them, the justices have to weigh in. Since they tend to hew to the politics of the president who appointed them, filling the docket with culture-wars cases risks making the court appear even more politicised.

Though powerful people on both sides of the political aisle agree that judge-mandering is dangerous, the question of how

to stop it is contentious. Unsurprisingly, those who happen to be benefiting at any time are unwilling to lay down their arms.

The Judicial Conference, a policymaking body composed of judges from across the country, tried to tackle judge-mandering in March. It issued a recommendation that all federal district courts should select judges at random for lawsuits seeking to impose or rescind national injunctions. Yet Republican politicians and some jurists resisted. The Northern District of Texas, where Mr Kacsmarky sits, said that it would make no such change "at this time". James Ho, a judge on the Fifth Circuit Court of Appeals in New Orleans, instructed his conservative colleagues not to buckle.

In April Chuck Schumer and Mitch McConnell, the Senate's majority and minority leaders, each introduced a bill that tackled the problem in different ways. But the chances of either making it successfully through both the Democratic Senate and the Republican House of Representatives are nil. Calling attention to the problem is one thing; fixing it is another.

Fortunately, the Judicial Conference has not yet spent all its ammunition. It is empowered under federal law to prescribe binding rules for the courts, not merely toothless guidelines. Although the agency may have hoped that the worst-offending districts would rein themselves in, the outright hostility to its recommendation shows that it will need to issue mandatory rules. Judges checking judges could go some way towards restoring the public's trust. In September Amanda Shanor, a professor at the University of Pennsylvania, sent the rule-making committee of the Judicial Conference a proposal that would impose random judicial assignments. The conference ought to adopt it.

If war is a continuation of politics by other means, so is judge-mandering. But fighting partisan battles with a partisan judiciary should be no one's idea of justice. ■



Lawrence Wong

New management in Singapore

The world's most improbable success story still needs to evolve

SINGAPORE IS WIDELY admired. Western politicians envy its sky-high living standards and its efficient civil service. In the emerging world it is a lesson in how to escape poverty. Yet the island state of 6m now finds itself confronting three of the world's greatest challenges: tension between the West and China, ageing and climate change. True, Singapore is so small that its policies cannot always be easily copied elsewhere. But how it handles its problems will still be worth watching. Part of the answer needs to be more open politics.

Singapore's destiny is in the hands of a new leader, Lawrence Wong, whom we interview this week (see Asia section).

On May 15th he becomes prime minister, as Lee Hsien Loong steps down. That will end what was, in effect, 59 years of rule by the Lee family (Goh Chok Tong ran things for 14 years, but even then a Lee was waiting in the wings, while another stayed on as "senior minister"). Mr Lee's father, Lee Kuan Yew, turned a colonial entrepot with seething racial politics into a gleaming metropolis. His formula included openness to trade, geopolitical neutrality and a technocratic government; less attractively, he sought to destroy opponents and muzzled free speech. Singapore's GDP per person is an astonishing \$88,000.

Many of Singapore's strengths are still on display. Relative- ➤

ly few of its citizens died during the pandemic. Its charms as a financial hub have been amplified by China's clampdown in Hong Kong. Singapore aspires to be neutral ground in a new cold war—a Vienna for the 2020s. It welcomes American warships but insists it is open to all navies, including China's. As tech wars rage, it hosts the regional headquarters of Silicon Valley firms but also those of China's Alibaba and ByteDance (which owns TikTok, now the subject of an American divestment order on national-security grounds). Having it both ways is a national doctrine that has served Singapore well.

Yet Mr Wong faces looming dangers. First, geopolitics could create a rupture. Tech dominates Singapore's manufacturing exports, so a full-blown decoupling of the West and China would shrink the economy by 10%. If America imposed sanctions on China it would put Singapore in a dreadful bind. Were it to enforce them, Chinese money would flee. If it refused to, America might limit access to the dollar financial system, the anchor of Singapore's banking and currency arrangements.

Second, the city-state is greying, fast. Rising health-care costs and a shrinking workforce will hurt growth. The answer is more migration of both cheap labourers and skilled foreigners (already 40% of residents are non-citizens). But that creates tensions as housing costs rise and natives worry that the white-collar jobs market is too competitive. The social fabric is being tested in other ways. Young people want a less uptight society. Many are angry about Gaza (see *Banyan*).

The final challenge is climate change. Singapore knows all about physical constraints: 20% of its land is reclaimed and it imports much of its water. But as a low-lying island it faces a shrinking perimeter and more flooding. And its economy is energy intensive, so emissions per person are high.

Mr Wong has good instincts on the economy. His priority is

for it to remain as open as possible. Embracing trade and capital flows means workers are exposed to the latest technologies. This is why median wages have risen more than in most rich countries. Growth generates new resources to solve problems and creates new industries, allowing diversification away from obsolete or sensitive sectors. But openness involves creative destruction, with sudden shocks and shifting jobs.

So Mr Wong also emphasises resilience. Singapore is expanding a negative income tax to help the poor and to retrain workers affected by technological change. It is investing \$75bn to protect itself from climate change, for example with sea walls. In finance it insists on high capital buffers and currency reserves to absorb turbulence. Economic openness plus enhanced resilience is Singapore's new formula.

Where Mr Wong should go a lot further is in political liberalisation. Singapore has evolved beyond the abrasive and authoritarian era of Lee Kuan Yew—but not enough. His ruling People's Action Party (PAP), in power continuously since independence, argues that Western-style liberalism could lead to polarising racial politics. Yet endless one-party dominance has risks, too. A climate of fear about overstepping boundaries throttles not only outside scrutiny of the PAP but also new ideas. Corruption and jobs for the boys can rise. And the inevitable divisions in a hypermodern society undergoing disruption can become hard to air or resolve.

Mr Wong has already undertaken a public consultation on Singapore's direction. But he should encourage a robust public discourse, in which the ruling party is less prickly about criticism and outside ideas. He should also remove the remaining constraints on the opposition, by making constituency boundaries independently determined and allowing a freedom of information act. Openness, resilience and more contestable politics will help Singapore continue to thrive. ■



European integration

Risks and rewards

As threats to Europe's economy mount, financial reforms are more important than ever

A SENSE OF DISQUIET is sweeping over the old continent. Innovative, low-cost Chinese producers are taking on Europe's venerable industries and unsettling its policymakers. Europe has played only a bit-part in the tech revolution: the market value of America's "magnificent seven" tech giants is about the same as that of the combined stockmarket capitalisation of the EU's 27 members. In an interview with us last week, President Emmanuel Macron offered his own diagnosis. There can be no great power without economic prosperity and technological sovereignty, but "Europe does not produce enough wealth per capita." It must become an attractive place to invest and innovate. This requires vast amounts of capital—and a well-oiled financial system that channels savings to promising investment opportunities across the continent.

The trouble is that European finance remains inefficient and bound by national borders. Pressing ahead with banking and capital-market reforms is thus more important than ever.

A decade ago European banking was on its knees. The

sovereign-debt crisis in the south exposed an infernal doom loop. Because banks held a lot of sovereign debt and governments had to bail out banks in difficulty, trouble at one infected the other. Lenders were unprofitable, unloved by investors and saddled with non-performing loans. Today those bad loans have been shed and profits have recovered (see *Finance & economics* section). The share price of UniCredit, one of Italy's largest lenders, has outperformed that of Meta this year. Big banks are now subject to European supervision and regulation, rather than a patchwork of national measures. Yet banking on the continent remains cumbersome and parochial.

Europe's banking union, first proposed in 2012, remains incomplete, mainly because a common deposit-insurance scheme has yet to be set up. One result is that the doom loop retains its power. Another is that too little cross-border activity and consolidation takes place. Regulators fear that if a bank collapses, they will be on the hook for loans made to dodgy borrowers beyond their borders. Without a common deposit- ➤

► insurance scheme, governments require banks to use ring-fencing regimes to hoard liquidity that could have been more profitably deployed elsewhere. The time to press on with such a scheme is surely now, when non-performing loans are low everywhere and even southern banks are in good health.

Banks are not the only source of finance. More must also be done to create a European capital market, which can help spread risks. National markets are underdeveloped: according to the IMF, only 30% of companies' financing comprises tradable securities in the euro area, compared with two-thirds in America. As a consequence, Europeans' vast savings are locked up in bank deposits, small firms struggle to obtain finance and entrepreneurs bear too much risk. By one estimate, a shock of one percentage point to national GDP growth results in a 0.8-point fall in consumption in the EU, but only a 0.18-point fall in America, where the pain is shared by investors, creditors and the government. No wonder Americans are more go-getting.

Although a proposal for a European capital-markets union was put forward in 2015, not much has been achieved. That is because regulations touching things like insolvencies, tax and disclosure have to be harmonised for an investor to see no difference between a security in Greece and one in Germany. Compared with whacking tariffs on Chinese cars, this is neither eye-catching nor easy. It is the spinach of public policy.

Eat your greens

Tariffs cheat European consumers by raising the cost of otherwise good and cheap products. By comparison, financial reforms channel Europe's large pot of savings into profitable investments. They should encourage innovation and make the economy more resilient, by spreading risk more widely. Europe rightly worries that it is falling behind as America and China charge ahead in the race for technological supremacy. But, as with the two superpowers, one of its main strengths is size. To keep up, Europe should make the most of it. ■

Latin America's gangs

Deadly violence

Not only does the iron-fist approach lead to authoritarianism. It does not work

DURÁN IN ECUADOR is one of the most dangerous cities in the world. Its murder rate of 148 per 100,000 residents in 2023 was almost 50% higher than the next most violent place, Mandela Bay in South Africa. Poor, and with about 300,000 inhabitants, Durán lies across the river from Guayaquil, one of the most important export hubs for cocaine. It is the worst example of a scourge that has brought misery to Latin America. Despite being home to just 8% of the world's population, the region accounts for a third of its murders.

To deal with the violence, Latin American leaders often resort to *mano dura*, the iron fist. They impose states of emergency, which may last indefinitely; they send the army into the streets; they carry out indiscriminate mass arrests. *Mano dura* has been championed by El Salvador's president, Nayib Bukele, who has locked up almost 80,000 people—over 1% of the population—in the past two years. The murder rate has plunged. Officials from across the region praise and seek to copy what they call the "Bukele model". They shouldn't.

The fact that *mano dura* undermines justice systems and leads to authoritarianism is reason enough to avoid it (see Americas section). But an equally important reason is that *mano dura* will not work elsewhere.

El Salvador's gangs were shambolic, poorly armed extortionists whose business model required them to operate openly in dense urban settings. They made meagre profits and were easily rounded up. By contrast, the criminal groups in places like Mexico, Brazil and Ecuador are much richer and better armed and can often draw on help from foreign criminal affiliates. They generate jobs and cash, and increasingly provide order and services in communities where the state is incapable, thereby winning the support of local people. Such groups are unlikely to be defeated through force alone.

Instead of *mano dura*, Latin American governments should

try a different approach. They need to accept that as long as illicit markets exist, so will gangs. (Legalising the production and consumption of cocaine would be the single biggest way to curb violence in the region, but it is not about to happen.) Instead of trying to eliminate entire gangs or focusing on bosses, governments should aim to discourage their most violent members from brutal acts, a tactic called "focused deterrence". Doing this consistently creates incentives for the whole group to spill less blood. Evidence from Mexico shows it can work.

Governments should also rely on police and the rule of law, not the army and indiscriminate arrests. Soldiers are neither trained nor equipped to gather the evidence on which prosecutions rely. Mass incarceration helps gangs find recruits, be-



cause they often control prisons. These methods undermine the justice system, which is essential to establishing long-term order that can outlast individual politicians. Instead of a doomed attempt to destroy gangs, the focus should be on squeezing their revenues by increasing their costs. This requires purging institutions of corrupt officials, and creating or strengthening specialised units that investigate money-laundering and arms-trafficking. Between 2016 and 2020, Ecuador convicted just 12 people for money-laundering.

The third focus should be on recruitment. Studies suggest that young men underestimate the dangers of joining a gang, and overestimate its benefits. The murder rate for men aged 15-29 is 16 per 100,000 worldwide; in Latin America it is 60. States should trumpet this grisly reality. A paper published last year in the journal *Science* estimated that reducing Mexican gangs' recruitment by 50% could halve weekly killings. That means keeping children at school and giving them opportunities once they leave. The iron fist may work against hoodlums. But powerful gangs have much more to fear from clean cops, corruption-busting judges and helicopter parents. ■

British politics

Labour's courtship of business

The party promises stability and growth. But businesses have worries, and rightly so

LABOUR'S STRONG results in local elections in Britain on May 2nd affirm the prediction from our forecast model that it is on course to form the next government—our central estimate gives it a thumping 106-seat majority. The transformation of Labour's political fortunes since the last general election has been accompanied by a fervent romancing of business. Gone is the disdain of Jeremy Corbyn, the party's former hard-left leader, who planned to collectivise a tenth of every big British company. In its place Sir Keir Starmer and Rachel Reeves, the Labour leader and shadow chancellor, have spearheaded a "smoked-salmon offensive", inviting executives to breakfast and waxing lyrical about the virtues of profit.

Bosses are keen to listen. It is easier to get tickets to see Taylor Swift's opening night at Wembley next month than to attend the party's "business day" in September at a dingy Liverpool conference centre. Executives can see which way the electoral wind is blowing, obviously, but there is more to it than that. Polls of business leaders suggest they would rather see Labour in power than the Conservatives.

Yet probe those leaders in private, and they profess alarming uncertainty about what lies in store under a Labour prime minister. At the heart of Sir Keir's pitch is a grand bargain (see Britain section). Labour promises to restore basic governing principles that have too often been neglected by the Tories: political stability, predictable policymaking and supply-side reform. In return, it will ask companies to swallow big changes, notably in labour markets.

A great deal is at stake for Labour and for Britain in getting this bargain right. The country has been plagued by low growth since the financial crisis of 2007-09. Money is so tight that the only way to pay for better public services is to improve the economy. But romances often end in disappointment, and the ways in which this one could sour are clear.

The party's attractions for business are real. Its senior figures are instinctively cautious, pragmatic and ruthless about winning elections. Sir Keir avers that lifting economic growth—rather than the conventional Labour priorities of redistribution or public services—will be the first order of government. Since the election in 2019, Britain has left the EU and had three prime ministers, five chancellors and seven chief secretaries to the Treasury. Labour promises to end political instability and investment-chilling policy churn.

Labour also aspires to win a large, rebellion-proof majority in Parliament, with which it promises to freeze corporation tax for five years and to retain some of the Tories' most sensible reforms, such as the full expensing of capital investment. Sir Keir pledges a more constructive relationship with Europe, though he will not reopen the question of Brexit. The party's young, urban electorate offers hope for a reformed planning system that allows homes and infrastructure to be built, not blocked. When Liz Truss was prime minister British debt was said to incur a "moron premium", reflecting the risk of politicians doing mad things. Sir Keir could bring a sanity dividend.

Yet as welcome as all this would be for investors, business still has reasons to worry about Labour. One is its interventionist instincts. Labour is strongly influenced by the thinking of the Biden administration: sceptical of "hyper-globalisation", enthusiastic about industrial policy and fond of terms like "economic security". Labour voters are more interventionist than both Conservative voters are now and Sir Tony Blair's supporters were in 1997. Labour MPs are more likely than their Tory counterparts to think business is under-regulated. The majority of Labour candidates in the most winnable marginal seats at the next election come from outside the private sector. The very notion of a "partnership" with business is a sign that Labour does not much care for laissez-faire. Yet a medium-size economy cannot mimic the industrial policy of a superpower.

Another source of unease is Labour's view of work. In 2022 the party unveiled a long list of proposed changes to employment law. Some of these, such as a promise to enforce existing laws, are laudable: several hundred thousand people are paid less than the national minimum wage each year, yet fewer than 20 employers were prosecuted between 2007 and 2021. But Labour also plans other reforms, such as giving employees full rights on day one (rather than after two years, as now), overhauling employment tribunals and tweaking the legal definitions of "worker". This could chip away at one of Britain's great strengths—an open labour market—and its corollary, low unemployment.

Adding to the unease is Labour's willingness to hold contradictory positions. The party rules out mass nationalisation as a poor use of state resources, but it makes an exception for the railways. It gleefully plans well-publicised tax raids on unpopular targets, such as

private schools, non-domiciled taxpayers and private equity, while also insisting that it would have the iron discipline to wait until growth materialises before funding extra spending. Its leaders lament the rise of protectionism, while promising "Buy British" policies for farmers and steelworkers. Ambiguity is understandable before an election. But Labour has been slow to acknowledge that it faces trade-offs, insisting blithely that it is both "pro-worker and pro-business" at the same time. For a party that promises an end to uncertainty, this combination of reticence and both-waysism invites suspicion.

Swipe left?

A Labour government comes with a risk, but it is not the right's fear that the hard left is poised to seize back the party and hoist the red flag from the Treasury. In reality even Angela Rayner, its base-pleasing deputy leader, is pragmatic (see Britain section). The real danger is that the leadership's instincts entrench economic stagnation. Caution may lead it to duck planning reform and forgo the chance of closer relations with Europe. A taste for intervention could poison the labour market. Illusions about industrial policy could blunt productivity.

Labour's courtship of business is based on stability. That is welcome and necessary—but it will not be sufficient. ■



Letters

LETTERS ARE WELCOME AND SHOULD BE ADDRESSED TO THE EDITOR AT:
THE ECONOMIST, THE ADELPHI BUILDING, 1-11 JOHN ADAM STREET, LONDON WC2N 6HT
EMAIL: LETTERS@ECONOMIST.COM. MORE LETTERS AVAILABLE AT: ECONOMIST.COM/LETTERS

Britain's island mentality

Britain's migrant policy and the decision to adopt legislation that is avowedly incompatible with the European Convention on Human Rights highlights a blind-sighted totemic deference to parliamentary sovereignty ("The buck stops way over there", April 15th).

Assuredly, Lord Hoffmann could write in 1999 that "Parliamentary sovereignty means that Parliament can, if it chooses, legislate contrary to fundamental principles of human rights. The Human Rights Act 1998 will not detract from this power." The problem nevertheless goes beyond Tory obsession with parliamentary sovereignty ("take back control") and the ECHR.

As pointed out in the Supreme Court's unanimous ruling of November 15th 2023, due consideration must be given to other instruments of international law (for example, the 1951 Refugee Convention) as well as domestic law (the Nationality, Immigration, and Asylum Act). When unwrapping the legal niceties of the Safety of Rwanda bill we are left with legal fiction (Rwanda is safe) and a desperate gamble to save the day at the next general election. What remains are inevitable legal challenges and the country's reputation as a champion of the international rule of law lying in tatters.

John Donne famously wrote, "No man is an island". Britain, an island, is embedded in a sea of international norms that it entered into of its own volition. Britain cannot go it alone. Its migrant policy and the plight of tens of thousands of asylum-seekers depends on compliance with the rules it willingly agreed to.

F.R. VAN DER MENSBRUGGHE
Professor at the University of Louvain in Brussels

Reform, plc

Bagehot underestimates the strangeness of the Reform UK party (April 27th). It is not a membership association, but a private limited company. Nigel Farage owns 53% of the shares.

He could thus sell his controlling interest in the "party" to anyone who cared to buy them.

DAVID HOLLAND
Brighton

Electric markets

I have worked in American energy policy for decades, and was enthused to see your coverage of the Federal Energy Regulatory Commission, which oversees the interstate transmission of energy ("What the FERC", April 27th). The article didn't capture the importance of the final rule set to be released by the FERC on May 13th, the most significant decision the agency will make for a generation. At the heart of the issue is competitive markets versus monopoly power.

The Economist routinely points out that free and fair markets deliver better outcomes for consumers. Transmission lines are no different. A study by Princeton University found that America will need to spend \$2.5trn on additional capital investment by 2050 to reach its net-zero goals. Competitive bidding can lead to savings of 40%.

If all new transmission projects were competitively bid, ratepayers could save an estimated \$840bn by 2050. If the FERC fails to embrace competition in its proposed rule, ratepayers and their wallets will feel the effects of the clean-energy transition for decades to come. This is a clear example of how free markets give consumers better outcomes. The FERC must endorse competition and so should *The Economist*.

PAUL CICIO
Chair
Electricity Transmission
Competition Coalition
Washington, DC

San Marino and Ukraine

I want to address recent speculation regarding San Marino's foreign policy ("A weak link", April 27th). Misconceptions circulate about our nation's position on various international matters, particularly concerning our relationship

with Russia and our support for Ukraine. I want to emphasise that San Marino is an independent nation with its own foreign-policy principles. It has consistently demonstrated its commitment to upholding international law, promoting peace and supporting all countries' sovereignty and territorial integrity, including Ukraine.

San Marino has taken concrete action to demonstrate solidarity with Ukraine and condemn Russia's belligerence. We have unequivocally supported measures to counter Russian aggression, including voting in favour of sanctions against Russia and supporting initiatives to increase support for Ukraine, such as further paid-in capital for the European Bank for Reconstruction and Development. San Marino has engaged in diplomatic efforts to tackle the crisis and has aligned itself with the European Union and other partners in calling for the immediate withdrawal of Russian troops from Ukrainian territory and a peaceful resolution to the conflict.

I want to assure you that San Marino remains steadfast in its dedication to promoting peace, stability and respect for the sovereignty of all nations.
PROFESSOR MAURIZIO BRAGAGNI
Consul for San Marino
London

Bad blood

You are wrong to ask "Has Taylor Swift peaked?" (April 27th). As an 11-year-old British Swiftie, I think Ms Swift's new album continues her tradition of "eras" (or moods, for non-Swifties). Most of the songs on any of her albums have the same beat and feel. "Fearless" is upbeat, whereas "Folklore" is more melancholy. In the same vein songs on "The Tortured Poets Department" are intentionally samey.

Having said all this, I still can't persuade my dad to pay for an Eras tour ticket when she comes to town.

ANIKA CHOPRA
Edinburgh

You claim that Ms Swift is boasting when she sings she is "so productive, it's an art". You then use this to argue that she should have employed "more selective editing" on her album. However, the full line, from "I Can Do It With A Broken Heart", is actually "I cry a lot, but I am so productive, it's an art." Perhaps the album could have used more editing, but surely Ms Swift is not boasting and is instead using dry wit to express how she balanced her heartbreak with her writing output.

CHARLOTTE SADLER
London

I was enraged when I read your article. "Peaked" is a little much, no? What's more, "mournful without being memorable" is not true in the slightest. I am literally humming "Who's Afraid of Little Old Me?" as I write this. "Jarringly immature" and "unimaginative rhymes"; is that really what you want to say to your youngest generation of readers?

If you wanted me dead, you should've just said!

SOFIA MARGO
Jersey City, New Jersey

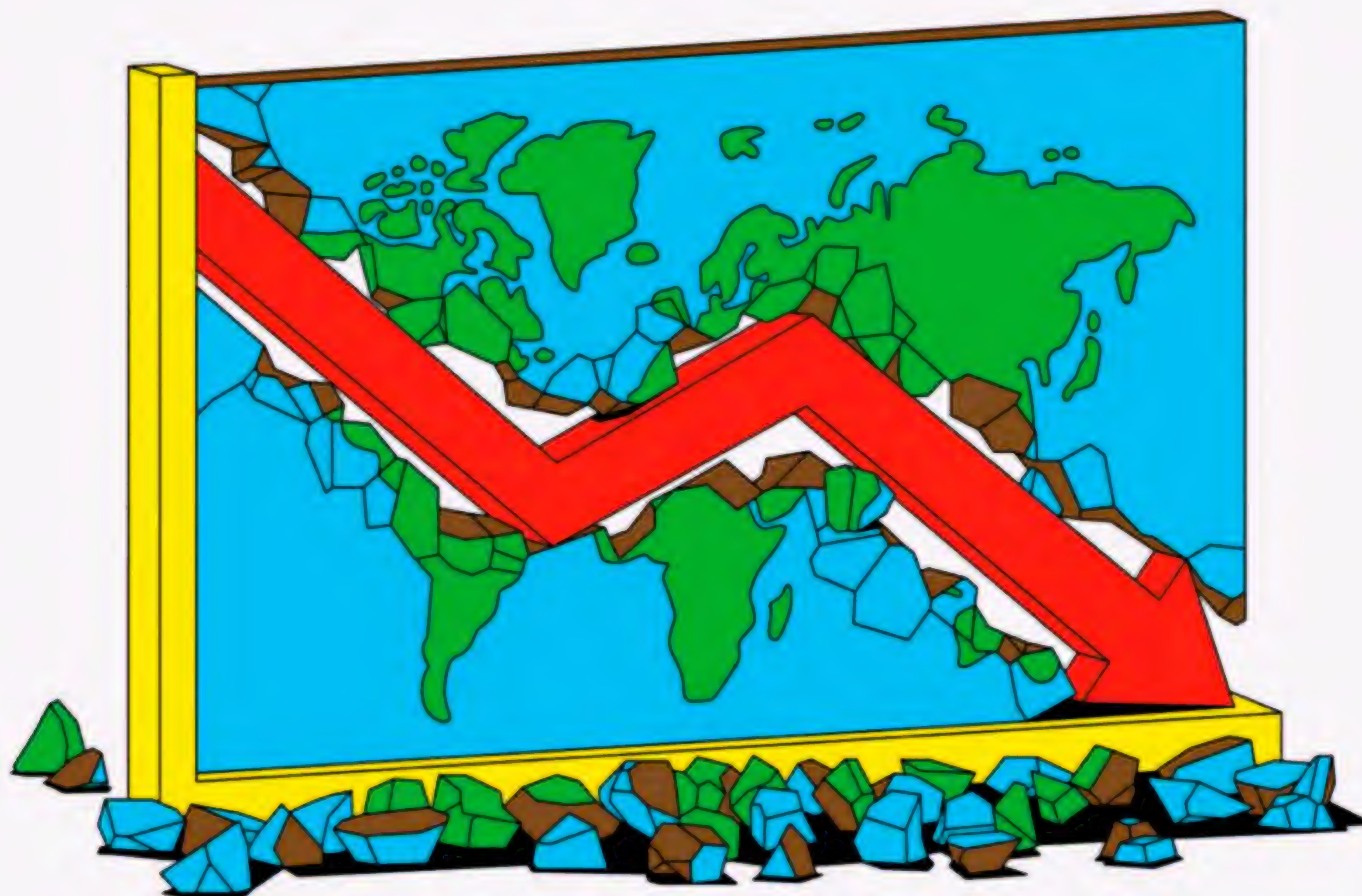
Taylor Swift peaking by the age of 34 would be no surprise. None of the greats from the 1960s and 1970s (the Beatles, Bob Dylan, Rolling Stones, Joni Mitchell, Neil Young, and so on) produced music of the highest quality beyond their mid-30s. Although they continued to record songs and sell albums, their most creative periods had passed.

ALAN WHITWORTH
London

Through the lens of longevity and popularity, Ms Swift has no equal. More than half of Americans admit to being a fan. She released her first album in 2006 and her triumphant Eras tour is still going. She overshadows the Beatles by almost every performance measure. Readers are simply asking, why you gotta be so mean?

GAVIN MAITLAND
Boston

Briefing Globalisation in reverse



The great regression

The international economic order is breaking down. Critics will miss globalisation when it is gone

IN LATE APRIL, for the 75th time in a row, America blocked a mundane motion at the World Trade Organisation to fill vacancies on the panel that is the final arbiter of disputes among the group's members. The relentless vetoes, obscure as they might sound, have in effect completely defanged the WTO for almost five years. Members that are found to have violated its rules can simply appeal against the decision, to a panel that is not functioning for lack of personnel. While the appeals moulder, the transgressions go unpunished. Two years ago, at one of the WTO's biennial summits, members resolved to get the dispute-resolution mechanism up and running again by this year. At the latest summit, earlier this year, having failed to do so, they instead decided, without even a hint of irony, to "accelerate discussions".

The dysfunction at the WTO is emblematic of a world where the institutions

and rules intended to foster international trade and investment are falling into abeyance. Every day brings alarming new headlines. The European Union, although supposedly both more supportive of free trade and more determined to reduce its greenhouse-gas emissions than other economic powers, is on the verge of imposing duties on Chinese electric vehicles. Last month EU officials raided a big Chinese security-equipment maker as part of a probe into subsidies. America recently imposed sanctions on more than 300 entities, including some in China and Turkey, for providing support to Russia's armed forces.

The proliferation of subsidies and sanctions is one of the most obvious signs of the unravelling of the "international rules-based order", as policy wonks like to call it. Institutions like the WTO were created to remove barriers to the movement of goods and capital and so foster trade and invest-

ment. This process has gone into reverse, with the obstacles multiplying as the rules fray. This unhappy regression—call it deglobalisation, for want of a better term—is beginning to become visible in the economic data, as investors reprice assets and redirect capital in a less integrated world. Although these shifts have not yet had much impact on global living standards, they constitute a giant and alarming gamble: that the enormous reductions in poverty brought about by globalisation can continue without it.

In the aftermath of the second world war, the global economy was a Wild West. Many countries imposed big tariffs on goods to build up domestic industry. Capital controls were strict. Governments regularly expropriated assets from foreign owners: it happened at least 260 times to American investors abroad between 1961 and 1975, according to an official report.

General agreement on tariffs

Even when foreign investors were tolerated, they were not given the red-carpet treatment. Consider George Cohon, the McDonald's executive who led the effort to set up a branch of the fast-food chain in the Soviet Union in the 1970s and 1980s. Foreigners were forbidden from taking »

▶ money out of the country, making it impossible for the firm to earn a return on its investment. Its only option was to reinvest any profits within the Soviet Union and hope that the rules would change in the future. Getting permission to open was also a slog. "This is a hamburger; this is an order of French fries," the late Mr Cohon recalled having to explain to surly bureaucrats in his memoir. At one point he was made to wait in a hotel room for 17 days for a contract to be translated and typed up.

International momentary freedom

The end of the cold war, however, helped stitch the global economy together more tightly. A consensus emerged, however fragile and reviled: that it was easier for economies to grow through integration than self-isolation. Tariffs fell sharply. Governments abolished many capital controls (including the ones that prevented McDonald's from taking profits out of what had become Russia). Many countries even surrendered some sovereignty to allow the emerging system to work better. One of the reforms that accompanied the evolution of the General Agreement on Tariffs and Trade (GATT) into the WTO in 1995 was the creation of a binding mechanism to resolve trade disputes—the one that America is now sabotaging. Politicians tried to court foreign investors like Cohon, rather than the other way round. This was always an incomplete process, in China in particular. But flows of trade and investment soared.

In recent years cross-border trade and investment have stopped growing (see charts 1 and 2). Three big scourges are undermining globalisation: the proliferation of punitive economic measures of various sorts, the sudden vogue for industrial policy and the decay of global institutions. The punitive measures do not typically take the form of higher tariffs. Although a few big countries, such as America and India, have been raising them, tariffs remain low by historical standards—and many governments continue to cut them. In Canada

and Japan average tariffs are still falling. Australia recently abolished close to 500 tariffs unilaterally. There is little sign yet of the sort of tit-for-tat escalation that hobbled the world economy in the 1930s.

But the world's governments are imposing trade sanctions more than four times as often as they did in the 1990s, according to the Global Sanctions Database, a research outfit. Western governments have put hundreds of sanctions on Russia in retaliation for its invasion of Ukraine. America is placing ever more restrictions on China to thwart its technological ambitions, especially in semiconductors.

Governments are also screening foreign investments more carefully and often barring investments in "strategic" companies. "The number of FDI regimes and regulatory enhancements is growing around the world, particularly in Europe," according to White & Case, a law firm. In America in 2022 (the latest official data) the Committee on Foreign Investment in the United States closely scrutinised 286 proposed deals, up from just 97 in 2013. The British government recently approved the sale of the country's largest chipmaking facility to an American firm, after blocking a bid from a Chinese-owned entity. A senior Canadian minister has boasted that his government has blocked a number of Chinese bids for mining companies, saying that the move had gone down "very well" with the American authorities.

Other countries are going to greater extremes and actually expropriating assets. Earlier this year Mexico's government ordered the seizure of a hydrogen plant belonging to a French firm. In March lawmakers in South Africa voted to confiscate land without compensation when it is in the national interest. A year ago Chile announced plans to expand the government's role in the lithium industry markedly. Russia's defenders complain that Western governments are discussing plans to expropriate Russian assets held abroad and divert the proceeds to help Ukraine.

The second big change is the rise of in-

Fewer places like home

US investors' risk premium on global investments*, percentage points†



*Gap between return on Americans' foreign investments and ten-year Treasury yields †Five-year moving average

Sources: BEA; Federal Reserve; Jordà-Schularick-Taylor Database; The Economist

dustrial policy. Politicians are frantically competing to build up domestic supply chains and local industries—not in coal and steel, as in the post-war period, but in clean energy, electric vehicles and computer chips. By one count governments around the world adopted over 1,500 policies to promote specific industries in both 2021 and 2022, compared with almost none in the early 2010s.

On the fiscal side, America is funneling billions of dollars to favoured firms to boost production of clean energy and computer chips. Last month TSMC, a chipmaker that has been promised vast state funding, announced that construction of a big new plant in Arizona was on track. Well-funded schemes to boost domestic manufacturing include "Made in Europe", "Make in India" and "A Future Made in Australia". Canada's government dubbed last year's budget its "Made-in-Canada plan". It is in subsidies, rather than tariffs, that a tit-for-tat escalation is occurring. A new paper published by the IMF finds a 74% probability that a subsidy for a given product in a big economy is met with a subsidy for the same product from another big economy within a year.

The third change relates to global institutions, which are a shadow of their former selves. The IMF used to have almost exclusive power to resolve poor countries' debt problems. But with the rise of alternative creditors such as China and India, it is finding that job more difficult. Each part of a debt restructuring, including steps that were once formalities, are often now subject to protracted negotiations. A growing number of countries, especially in sub-Saharan Africa, are nearly or already unable to service their debts. Yet resolving such crises is proving almost impossible.

The IMF has also changed from within. The organisation, chastened by widespread complaints that its policy prescriptions were too harsh in the 1980s and 1990s, now devotes growing attention to questions of climate change and inequality at the expense of its overarching mission ▶▶

Slowing and slumping

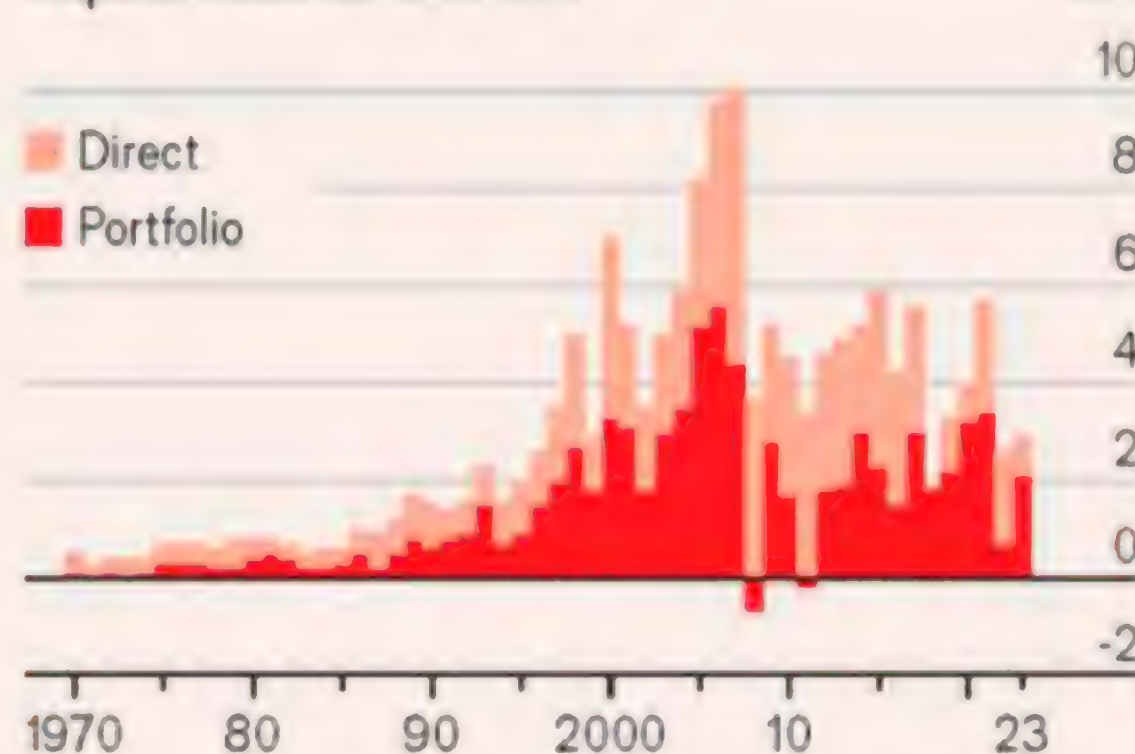
World

Exports as % of GDP



Sources: World Bank; IMF

Capital flows as % of GDP

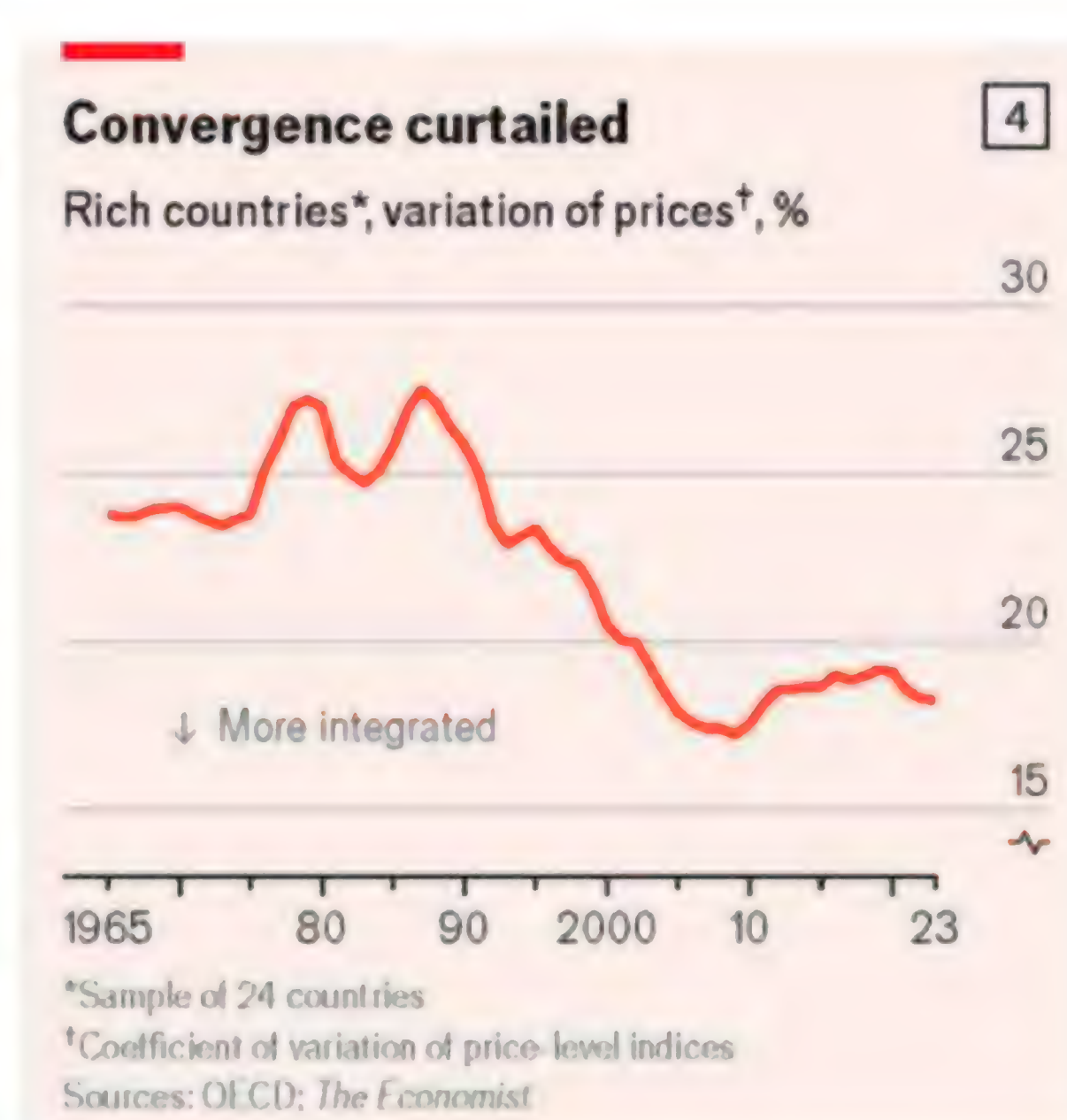


of instilling sound macroeconomic management. In the latest edition of its flagship annual publication, the "World Economic Outlook", the word "reform" appears 63 times, compared with 171 times in the edition of 30 years ago.

The most moribund multilateral institution, however, is the WTO. Since the collapse of a 14-year-long negotiation in 2015, all talk of expanding free trade or deepening protections for it has fallen by the wayside. This year's summit only just managed to extend a moratorium that, had it lapsed, could have seen countries imposing tariffs on cross-border transfers of data, including software and music. With the appeals process frozen, governments can adopt capricious policies with little fear of censure. In the past year an index of "trade-policy uncertainty", produced by economists at the Federal Reserve, has been nearly twice as high as the long-run average.

World trade ostracisation

The effects of these three scourges are predictably grim. An index that tracks references to economic uncertainty in prominent publications is at twice its average level from 1997 to 2015. Not only has global trade in goods stagnated; the same problem now afflicts services, too. Cross-border investment is in retreat, as well, as a share of global GDP. Both long-term (direct) and short-term (portfolio) flows are well below their peaks. Companies are retrenching, to avoid geopolitical rifts in particular. The share of American corporate profits coming from abroad is falling fast. Western law firms and banks are pulling out of China. After Russia's invasion of Ukraine in 2022, McDonald's quit the Russian market. A new Russian-owned restaurant, "Delicious, full stop", has taken over many of the



American chain's outlets. (As if to bear out Cohon's proselytising about the benefits of globalisation, the new restaurant has received poor reviews.)

Those investors still willing to venture abroad expect a higher rate of return. *The Economist* analysed data published by the Federal Reserve on stocks and flows of cross-border investment. For years the gap between American investors' returns abroad and that on risk-free Treasury bonds was shrinking, suggesting that the world was becoming a safer place. But in recent years the gap has widened again, pointing to growing global instability (see chart 3 on the previous page).

Another sign of deglobalisation comes from relative prices—how similar prices are for the same goods and services in different places. In a seamless market, variation should be small as firms and consumers seek out the best deals and incomes in poorer areas catch up with richer ones. Before the pandemic average prices in Britain's costliest region were only about 10%

higher than in its cheapest, for instance.

For years the variation in relative prices around the world was declining, signalling a convergence. But in recent years progress has stopped or even gone into reverse (see chart 4). Admittedly, economists' dream of a single global market was always a distant prospect. Some services are hard to trade—a lawyer or barber in Rome will struggle to attract customers from Auckland—meaning that prices are unlikely ever to converge fully. But growing global variation suggests that the world economy is atomising rather than integrating.

The reduced efficiency that this entails does not seem to bother the many politicians who are embracing deglobalisation. So far the economic damage has been limited. Last year global GDP grew by a respectable 3%. Some of the countries that have embraced isolationism most enthusiastically, including America and India, are growing especially quickly. That has prompted some to argue that deglobalisation will actually boost growth.

That seems improbable. The golden age of globalisation caused an unprecedented decline in global poverty. The number of Chinese living in extreme deprivation, for instance, has fallen from 800m to almost zero. "Starting around 1990, developing economies began to grow more rapidly and catch up to the higher income levels enjoyed by advanced economies," says Douglas Irwin of Dartmouth College. Research published in March suggests that inequality within countries has declined, too. Moving away from global integration thus presents a massive risk to the world's poor, in particular.

Nonetheless, politicians appear wedded to deglobalisation, which they see as a means to secure a slice of "the industries of the future". Narendra Modi, who is about to be re-elected as India's prime minister, is spending vast sums on a "production-linked incentives" scheme to boost its share of global manufacturing. China's leaders, meanwhile, are spending a fortune to strengthen their country's position as the global leader in clean energy and electric vehicles. Donald Trump, who may win a second term as America's president in November, is mulling a 60% tariff on all Chinese goods. He may well revive an old threat to quit the WTO altogether. Joe Biden, the incumbent, is only slightly better. He is convinced that subsidies can turn a services-dominated economy back into a manufacturing powerhouse. The EU, for its part, wants the WTO to allow space for industrial policy in future trade deals. At the same time tensions between the West and China make economic warfare ever more likely, even as they reduce the chance of meaningful reform to global institutions. As deglobalisation gathers pace, its true costs are likely to become clear. ■



How countries are leveraging digital public infrastructure to make life easier for residents

As low-income countries across the globe look to more sophisticated ways to provide critical services, digital platforms designed to make life easier for residents are starting to bear fruit.

New digital payments systems are helping to get aid rapidly into people's bank accounts when they need it most and are making it possible for businesses and entrepreneurs to transact directly with customers. Online data sharing is also enabling instant access to government records, and digital identification (ID) is protecting personal information while ensuring a person is who they say they are.

The true magic happens when countries begin to connect these types of digital systems—payments, ID and data exchange—into a nationwide digital public infrastructure (DPI). When DPI is built to be interoperable and inclusive, it allows countries to take major leaps forward in economic growth.

"Digital public infrastructure is not just about tech," says Rodger Voorhies, president of the Bill & Melinda Gates Foundation's Global Growth & Opportunity Division. "It is about empowering people and ensuring everyone sees and feels first-hand the benefits of an equitable and efficient digital economy."

The results in some cases are staggering. DPI can speed up growth paths in low- and middle-income countries by two to three years, and accelerate development trajectories by more than a decade, research from the United Nations Development Programme shows.



In the financial sector, digital platforms have boosted the pace of economic growth in these countries by one-third. Under India's DPI initiative, the number of citizens with bank accounts has more than doubled in just a decade. India's biometric ID system Aadhaar and its CoWIN vaccine network have enabled promising first steps for long-term change, too.

The past four years have highlighted how DPI has been transformative in countries hit hardest by the covid-19 pandemic. Countries that distributed aid digitally did so, on average, 35 days earlier than those that did not, research funded by UKAid shows. And in Brazil, a new payment system set up for aid distribution has resulted in nearly 30m people opening their first bank account.

Other standouts predate covid-19. In Sierra Leone, a digital payments system devised to transfer funds to workers during the Ebola outbreak a decade ago is now freely available to other countries and has been used ever since for humanitarian aid.

No two countries' digital strategies are alike. Nor should they be, says Mr Voorhies, who advocates a whole-of-society DPI approach that ensures these new tools are interconnected, inclusive and adapted to a population's distinct challenges.

"Digital platforms will only reinforce inequity if they aren't specifically designed to meet the needs of the poor, women, informal workers or marginalised groups," he says. "Countries ought to foster an open culture where these populations can participate in the DPI design and implementation process to ensure their specific needs are identified and met."

"Digital public infrastructure is not just about tech. It is about empowering people and ensuring everyone sees and feels first-hand the benefits of an equitable and efficient digital economy."

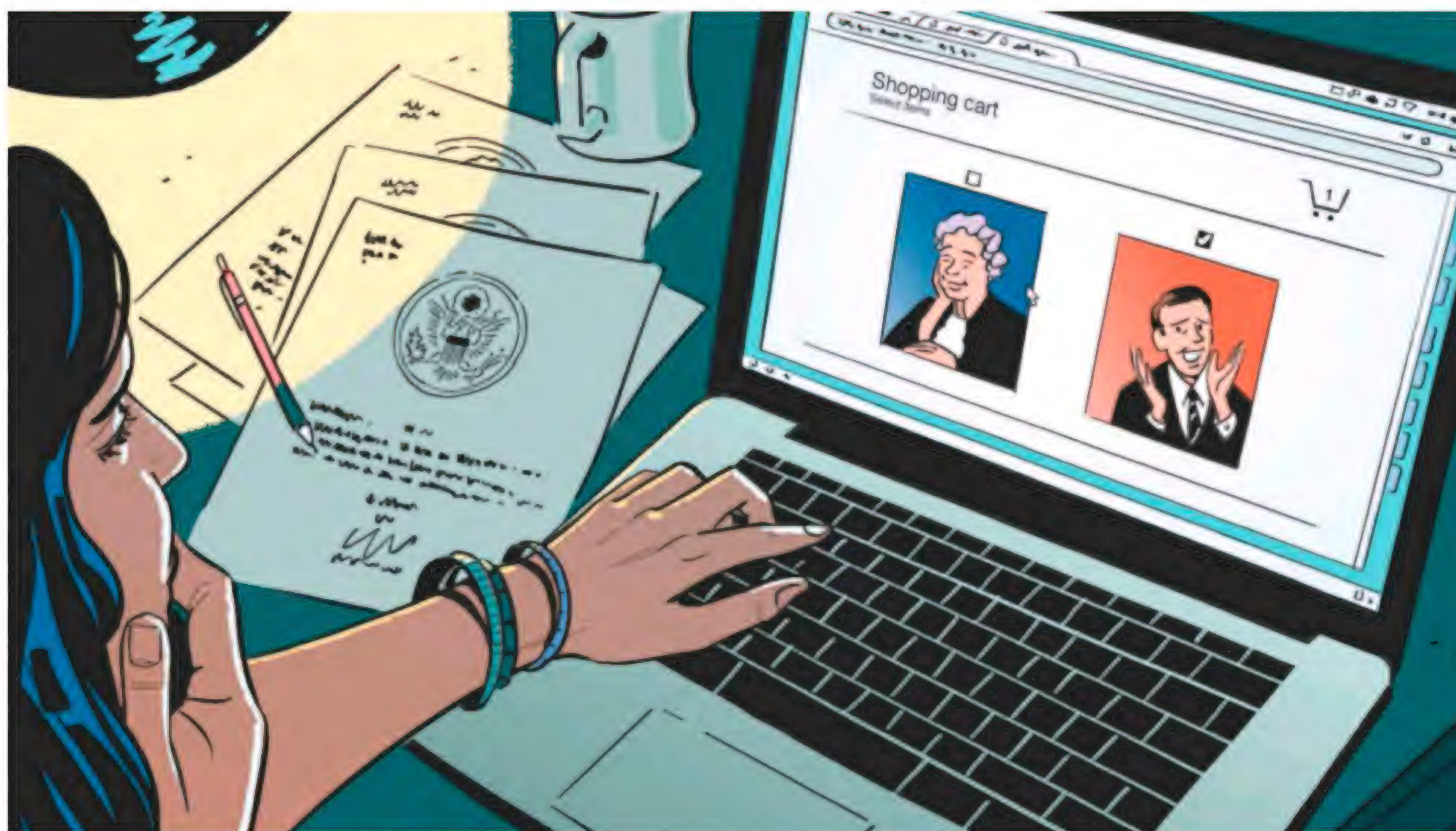
Rodger Voorhies, president of the Bill & Melinda Gates Foundation's Global Growth & Opportunity Division

Produced by El Studios for Bill & Melinda Gates Foundation

BILL & MELINDA
GATES *foundation*



United States



Court-shopping

An end to judge-mandering?

AMARILLO AND NEW YORK

America's federal district courts may soon be harder to manipulate

AMARILLO, TEXAS, is known for its abundance of cattle, a local restaurant's 72-ounce steak-eating challenge and, along an interstate highway, a vibrant drug trade. It is the narcotics traffickers who fill the town's federal courthouse. Judge Matthew Kacsmaryk, appointed by Donald Trump, spends most days overseeing trials about fentanyl pills and powdered meth. But his rulings on several spicier cases have made the 47-year-old a conservative darling far beyond the Texas panhandle.

Mr Kacsmaryk, who was brought up evangelical, reads the law like verses of Deuteronomy, interpreting the constitution by attempting to divine what it meant in the founding era. That conservative philosophy has led Texas's attorney-general and other right-wing lawyers to bring cases against the Biden administration to Amarillo, where Mr Kacsmaryk hears each one.

In 2021 he ordered Mr Trump's "Remain in Mexico" policy, which forced asylum-seekers to stay beyond the border during processing, to be reinstated. In 2022 he

nixed federal protections for transgender workers. In March he put on hold President Joe Biden's lending rules for poorer Americans. And in recent days Texas has again turned to Amarillo to challenge Biden administration rules protecting gay and trans students and closing a background-check loophole for gun sales.

The case that made Mr Kacsmaryk a villain to the left is still under way. Last spring he issued a stunning ruling outlawing mifepristone, an abortion drug used by millions of women. The Fifth Circuit Court

of Appeals in New Orleans scaled it back, but the case went to the Supreme Court in March. A decision is expected in June. In his chambers in Amarillo Mr Kacsmaryk is unassuming. Yet he is shaking up America.

That is thanks to a curious feature of America's legal system: the practice of filing lawsuits in places where a sympathetic judge advances a litigant's mission by halting a government policy. The strategy—call it "judge-mandering", a cousin of electoral gerrymandering—has thwarted Mr Biden's policies on immigration, student loans and abortion pills. Before that it frustrated Mr Trump's efforts to bar transgender soldiers, divert emergency funds to build a border wall and keep out travellers from certain Muslim countries. Judge-mandering has two components: filing lawsuits in places where litigants are guaranteed to find a friendly judge; and seeking a ruling that applies nationwide.

But efforts are afoot to stop it. In March the Judicial Conference issued new guidance. The body (comprising 25 lower-court judges plus America's chief justice, who chairs it) sets policy for the federal courts. It suggested that cases involving challenges to national or state policies should be randomly assigned among all judges in one of America's 94 districts, to avoid high-profile cases systematically landing in a division with a lone judge. It has met some resistance. The chief judge of Mr Kacsmaryk's area said his courts would make no

→ ALSO IN THIS SECTION

- 18 Donald Trump's trial
- 19 Tackling absenteeism in schools
- 19 Kristi Noem's curious incident
- 20 The estate-sales boom
- 21 Unionisation in the South
- 22 Lexington: Class act in Milwaukee

► such change: doing so would force court staff to travel far from home. (The district is about as big as Michigan.)

In the Senate, meanwhile, duelling approaches have emerged, each tackling one of the two components of judge-mandering. Mitch McConnell, the Republican minority leader, has introduced a bill seeking to limit judges' ability to block policies nationwide. Chuck Schumer, the Democratic majority leader, proposed legislation largely tracking the Judicial Conference's move.

Lone star judges

Clever lawyers have been flocking to sympathetic jurists in single-judge divisions for decades—not least in the Lone Star State. In 1968 Lyndon Johnson appointed William Wayne Justice to the federal bench. He became a magnet for civil-rights lawyers. His rulings that schools had to desegregate, and that prisons needed sweeping reforms, gave him a reputation for “shattering old Texas”.

In a motion to move a national immigration case out of small-town Texas last year, the Biden administration noted that all 28 lawsuits the state had brought against the federal government were filed in districts “where local rules severely limit the number of judges to whom the cases could be assigned”. And 18 were brought in four districts—Amarillo, Galveston, Midland and Victoria—with just one judge. Such judge-shopping “runs the risk of undermining public confidence in the integrity of the judiciary”, says Steve Vladeck, a law professor at the University of Texas.

Aiming for a judge inclined to side with you would be of little help if the ruling applied to just one dusty corner of America. So the second part of judge-mandering is the national injunction: the ability of any of America's 677 district-court judges to stymie a government action nationwide.

A recent article in the *Harvard Law Review* shows that use of such injunctions has risen in the past decade, peaking when Mr Trump was in the White House. And whereas roughly half of the injunctions against George W. Bush and Barack Obama were handed down by judges appointed by presidents of their own parties, 59 of the 64 against Mr Trump were imposed by judges seated by Democrats, and all 14 against Mr Biden in 2021-23 by jurists picked by Republicans (see chart).

For much of the country's history the judicial process has been more measured, with the Supreme Court typically stepping in only after two or more regional appellate courts reached disparate rulings. For a single district-court judge to issue a ruling so momentous that the Supreme Court has no choice but to take it up in a rush looks to many like a sign that something has gone awry. It is starting to weigh on some members of the Supreme Court.

In 2020, in a case on a move by Mr Trump against asylum-seekers, Justices Neil Gorsuch and Clarence Thomas looked askance at overreach by a New York judge who had blocked the change. Liberals are fed up, too. In 2022 Justice Elena Kagan suggested that Texas's far-fetched argument against Mr Biden's immigration-enforcement policy had prevailed at trial only because the state managed to “pick” a judge whose rulings dependably thwart Mr Biden's plans. In March Justice Gorsuch criticised Mr Kacsmark's rejection of mifepristone. A court should not, he said, position itself as “a nationwide legislative assembly”. And in April seven justices mused about national injunctions in a case on transgender medical care for children. Lower courts, Justice Gorsuch wrote, should revert to a “more piecemeal and deliberative judicial process”.

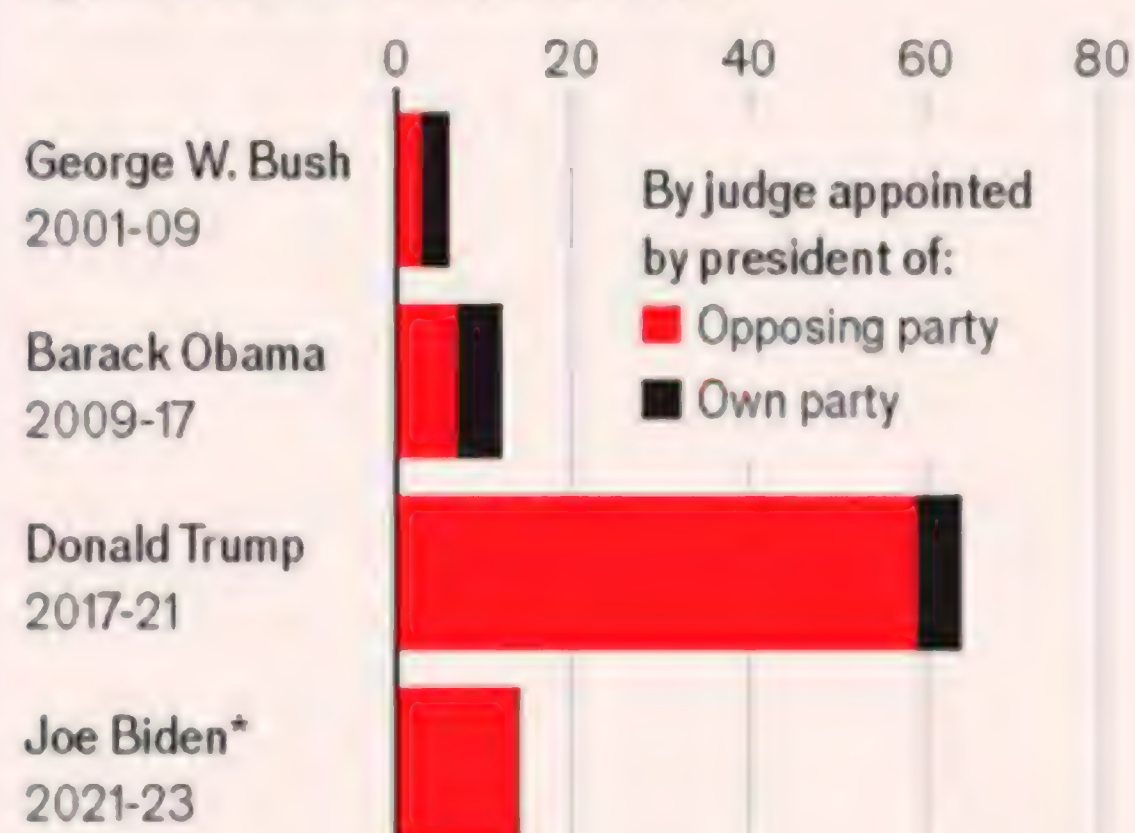
On a recent evening in Midland, Texas's oil capital, James Ho, a Fifth Circuit judge, gave a speech criticising the efforts to curb judge-mandering. In sports, he said, the home teams have an advantage because umpires “don't like to be booed by the hometown crowd”. So too can federal judges be swayed by pressure from powerful people. But he reckons that jurists who stay calm and carry on despite scorn from Washington's political elites—like his friend in Amarillo—need not be muffled.

The “hometown crowd” Mr Ho is decrying seems to include Chief Justice John Roberts, who brought attention to judge-shopping in his year-end report on America's judiciary in 2021, and Jeffrey Sutton, the chief judge of the Sixth Circuit Court of Appeals, who hailed the Judicial Conference's new policy. Both are conservatives appointed by George W. Bush.

Moves from left and right suggest a new mood is emerging that courts need to be unrigged. It is no longer just fans of the opposing team who are shouting at the referees. Soon Mr Kacsmark may be compelled to turn more of his attention back to the slice of the country where the southern plains meet the western desert. ■

A game of two sides

United States, nationwide injunctions against administration's policies



Source: *Harvard Law Review*, April 2024

*Estimate

The Trump trial

Waiting to climax

NEW YORK

The star witness has yet to appear

DONALD TRUMP's criminal trial, soon to enter its fifth week, has felt like drawn-out foreplay. There have been moments of frisson. But as with any such encounter that stretches on and on, arousal waxes and wanes, prompting a few fateful questions. Where is this going? Hurry it up already? Ultimately, climax in this trial will depend on the testimony of one man: Michael Cohen, Mr Trump's former lawyer. And he is not due on the witness stand for several days yet.

Instead this week jurors heard from Stormy Daniels, a former porn star and current host of the gay-dating show “For the Love of DILFs”. The felony charges against Mr Trump stem from a payment that Mr Cohen made to Ms Daniels before the 2016 presidential election, to keep her story of sex with the then candidate out of the press. Her description of that encounter in 2006—which Mr Trump denies—was salacious. There was talk of spanking and missionary position. The defence tried to paint her as a money-grubbing extortionist, to which she replied matter-of-factly: “Don't we all want to make more money in our jobs?”

At times Ms Daniels's story strayed far from the alleged felonies. Prosecutors must show that Mr Trump ordered Mr Cohen to front the hush money and mislabelled business records to mask its reimbursement. Only three people can attest to that: the defendant himself, who denies it and has no obligation to testify; Mr Cohen; and Allen Weisselberg, a former executive at the Trump Organisation who is in prison and not expected to take the stand. So Mr Cohen's credibility will be decisive.

In the meantime prosecutors have supplied heaps of circumstantial evidence suggesting that Mr Trump was in on it. They played a recording of him and Mr Cohen discussing a separate, similar payment to a former *Playboy* model. They asked underlings to describe how, as a micromanager, he personally approved cheques like those he made out to Mr Cohen for the alleged reimbursement. Then they quoted from his own advice books: “I always sign my cheques, so I know where my money's going.”

Missing school

Absent no more

ALBUQUERQUE, NEW MEXICO

Clever policies have got some truant children back in the classroom

MANY FAMILIES with children were clamouring to get back to in-person learning during the covid-19 pandemic. But many pupils were less eager to do so, and some still have yet to properly return. Thousands of children disappeared from the rolls. Fortunately, a few schools seem to have worked out how to coax some of their pupils back to their desks.

Absenteeism was a problem long before covid, but the disruption made things far worse. According to a study from Stanford University, more than a quarter of all American pupils in the 2021-22 school year missed at least three and a half weeks of school—almost double the pre-pandemic rate. Every one of the 40 states in the study saw an increase in absenteeism after 2018-19, the last full academic year before the pandemic. The worst rates, and some of the biggest rises, were in Alaska and New Mexico (while Alabama and New Jersey were best in class).

A few states punish families for truancy. Parents can be fined or charged with civil or criminal offences. Pupils can find themselves in juvenile custody. Other states do not allow such punitive measures, so schools are limited in how they can respond. But some studies show that punishments do not seem to work.

"These things are more complicated than parents and kids being lazy," says Keri Rodrigues, president of the National Par-

ents Union, an advocacy group. Several districts have hired absenteeism officers—friendlier versions of truancy officers—to knock on parents' doors. But many of the parents who fail to send their children to school today are the struggling pupils of the previous generation, says Ms Rodrigues. School was not a positive experience for them, so teachers need to persuade parents that classes are worth attending.

One way is through better instruction. A different Stanford study found that high-impact tutoring, defined as 90 minutes a week of small-group instruction, is projected to improve attendance in some schools in the District of Columbia by two to three days in the year. Yet plenty of schools need to improve by much more than that. Take Manzano High School in Albuquerque, New Mexico: in 2021-22, 63% of pupils were chronically absent (meaning they missed 10% or more of the school year).

To tackle the problem, administrators at Manzano went into partnership with the GRAD Partnership for Student Success, a collaborative effort between several non-profit organisations and universities. In 2022-23 the school's chronic-absenteeism rate dropped to 45%. For the current school year, which ends on May 31st, administrators expect that the figure will drop further, to nearly one-third. Though the data do not prove a causal link, school leaders are confident that the new programme is driving the results.

The policy focuses on two key components: data and relationships. First, school leaders must know who is struggling, as indicated by pupils' absences, grades and other criteria. Many schools do not have reliable data, and if they do have the information, they are not analysing it to identify trends and the troubled.

The second part involves relationship-building with families. For some, this means getting help with immediate needs. The school hosted a resource fair where families were able to learn about federal programmes that provide housing and food. It also connected parents with potential employers, faith-based services and other local resources.

A dedicated counsellor, Jeanie Stark, identifies pupils in need of support. "I was so scared," says Zeth Wilkinson, a senior, recounting the moment two years ago when Ms Stark called his family about his absences and poor grades. He remembers

being terrified of Ms Stark. He says his parents were furious about the call—they were not aware that he was struggling.

Once pupils are identified, Ms Stark works with their families to improve the child's performance. Sometimes there are easy fixes. Two years ago David Hurtado just needed his texts in Spanish. Since receiving those books, transferring out of one troublesome elective course and meeting Ms Stark regularly, his grades have improved. David is set to graduate this month, and he will be the first in his family to earn his high-school diploma.

The GRAD Partnership programme is multifaceted, but its message is simple: relationships matter. "When you feel more connected to school, you come more often and you do better," says Bob Balfanz, the director of the Everyone Graduates Centre at Johns Hopkins University, the lead organisation within the GRAD Partnership.

Zeth Wilkinson's opinion of the programme has changed since that initial anxiety-ridden call. He now meets with Ms Stark regularly. He has got involved with drama, and his grades have improved. He too is about to graduate this month, a big accomplishment since neither of his birth parents graduated from high school. "It's crazy that one simple check-in can go so far," Zeth says. Without Ms Stark, "I would be so lost." ■

Kristi Noem

She got her goat

After she had shot the dog

THE CAMPAIGN memoir is an American tradition with a few signature ingredients. These include a flattering headshot, a title superficially stirring but actually meaningless (see Kamala Harris's "The Truths We Hold" or Ron DeSantis's "The Courage to Be Free") and above all a text that is gently self-congratulatory and so insipid as to be entirely unmemorable. Kristi Noem, the telegenic Republican governor of South Dakota plainly angling to be Donald Trump's running-mate, has released her own contribution to this grand literary tradition. It succeeds on only two of these three counts: the photo looks expensively posed (with a gilt clock and feminist placard in the foreground and an American flag in background), and the title ("No Going Back") is suitably vapid. But the contents are unfortunately memorable in the worst possible ways.

Most surreal and disturbing is the story Ms Noem recounts, with some joy, of



The route to knowledge

▶ shooting one of her dogs. Cricket, the ill-fated animal, was a 14-month-old wirehair pointer who ruined a pheasant hunt that Ms Noem had planned for her lodge guests. The rumbustious Cricket then finished her day by attacking some chickens ("she was a trained assassin") and attempting to bite the hand that fed her (Ms Noem's). "I hated that dog," the governor writes. She then decides to put her down by shooting her dead in a gravel pit.

Cricket was not the only casualty that day. On her way home, Ms Noem writes, she spots a billy goat that also needed disposing of. "He was nasty and mean, as most male goats are that are left uncastrated," she explains. The impulsive deed, partially justified on account of the stench of the goat's urine, is then performed in the same gravel pit.

On returning home, the governor recounts, her children asked her: "Hey, where's Cricket?" (Her reply is not given.) This is all meant as a prelude to her penetrating insights about leadership: that it is not easy and sometimes messy. "I guess if I were a better politician I wouldn't tell the story here," she writes with some self-awareness, but not enough.

Corpus Kristi

This (along with a fictitious account of meeting with North Korea's despot, Kim Jong Un, who she says underestimated her fortitude) has junked her chances of being on the Trump ticket. Ms Noem has given various disastrous media interviews defending herself by, among other things, suggesting that Joe Biden ought to euthanise his own dog, which had a penchant for biting Secret Service agents before being sent off to an undisclosed location. The public-relations disaster rather resembles the misadventures of Sarah Palin—the former Alaska governor chosen to be John McCain's running-mate in 2008—except that Ms Noem will probably never actually enjoy the pomp and perks of a vice-presidential nomination.

Various would-be vice-presidents flew to Palm Beach, Florida, last weekend for a real-life version of "The Bachelor", in which Mr Trump is the eligible fellow and the prize is a posh four-year stay in Washington with a decent actuarial chance of acquiring the nuclear launch codes. Doug Burgum, the North Dakota governor, was there, as were several senatorial suitors like J.D. Vance of Ohio, Tim Scott of South Carolina and Marco Rubio of Florida. Lesser-known lawmakers who are also under consideration, including Elise Stefanik and Byron Donalds, showed up for the auditions as well.

Ms Noem happened to be there, too. No incidents were reported. Any animals in the vicinity must have been safely in their kennels, or on their best behaviour. ■

Estate sales

Good stuff

ARLINGTON HEIGHTS

The business of selling people's possessions is thriving offline

IN A HOUSE on a cul-de-sac in Arlington Heights, a nondescript suburb of modest 1950s homes north-west of Chicago, Deborah Fossett is counting hundred-dollar bills. Holding each one up to the light, she examines nine in total. Satisfied, she writes out a receipt, and hands it to the customer, who picks up his purchase—an antique set of silver Tiffany cutlery. Similar sets online sell for thousands of dollars, she tells him. But this one is missing several pieces, and in any case, everything in the house must go, and it is past two o'clock, so \$900 is enough. He eyes his bargain again and quickly leaves.

Ms Fossett runs Chicago Estate Advisors, a firm which will sell everything in your house for you. Typically the clients are the relatives of recently deceased former occupants, though sometimes they are people who are merely downsizing or decluttering. Almost all of this activity happens in person, offline. Most of the firms doing it are small, like Ms Fossett's.

Even as the sale of goods on websites like eBay has stagnated, estate sales are booming. Marika Clemow of EstateSales.net, where such sales are advertised, says the number has grown almost continuously for the 20 years the site has operated, with over 120,000 of them posted last year (up from 102,000 in

2019). It is a lesson in how offline commerce can still sometimes beat the online variety. But the boom is also evidence of how an ageing population, and higher rates of death, are creating an almighty problem: when people die, what to do with all of their stuff?

Estate sales are generally held over two or three days, usually at weekends. Advertisements are placed both online and physically, around a neighbourhood. At a popular one, on the first day crowds will queue up before it opens. At an appointed hour they are allowed in en masse to hunt for things they want and make offers. Prices drop quickly as the sale progresses. Things often sell cheaply because speed is of the essence.

Clients turn to estate sellers because they need cash to cover funeral costs, or nursing-home costs, or they need to get a home in order for sale quickly. Compared with previous generations, the baby-boomers own an awful lot of stuff. And often their children or grandchildren lack the space or the inclination to keep much of it.

During the covid-19 pandemic most such sales went purely online. But, says Ms Clemow, a large majority have returned to in-person operations. Inviting buyers to rummage around a house is a lot less effort than photographing and describing every item to sell online. Buyers tend to like the chance to see things physically, and to find something they were not looking for. And they get to take it away immediately.

"There's a competitive element to it, which I think younger people are not scared of," says Virginia Chamlee, the author of "Big Thrift Energy", a guide book for bargain-hunters. Social media are full of guides (some of them made by Ms Chamlee) about how to get the best deals. Sellers are increasingly present there too.

Can the boom last? The supply of old stuff is seemingly endless. The trouble is, not everybody has vintage Tiffany cutlery to sell. Ordinary bric-a-brac is harder to get rid of. Much of what fails to sell ends up in the skip. In 2018, according to the Environmental Protection Agency, 37m tonnes of durable goods went into landfill. It will take a lot more bargain-hunting to reduce that figure.



Everything must go



Organised labour

Will unions sweep the South?

ATLANTA

The UAW won big at Volkswagen in Tennessee, but organising at other car plants is harder

LAST JULY car parts as heavy as a small horse fell on Renee Barry. Three surgeries later she has metal rods, bolts and screws up her arms and cannot lift her two-year-old grandchild. In her 14 years working on the assembly line at the Volkswagen plant in Chattanooga, Tennessee, she found the factory floor to be disorganised and unsafe. Eventually she joined a union drive to persuade her colleagues to take action. When workers voted in late April to make Volkswagen the first foreign carmaker in the South to unionise, Ms Barry fell to the floor in joy, raised her hands and called out: "Thank you, Lord, you heard our cry."

The United Auto Workers (UAW) union hopes that the Volkswagen victory will set off a domino effect across the sunbelt, a region that has long been hostile to labour organisers. But was the win a fluke or a bellwether? That question will soon be tested: next week 6,100 workers at the Mercedes-Benz plant in Vance, Alabama, are due to vote on whether to unionise. There, things look less favourable for the UAW.

In the 1980s carmakers began moving from the Midwest to the South, where regulation was sparse and states offered vast subsidies to newcomers. With the rise of globalisation southern politicians made the region competitive by keeping unions out and holding wages down. Right-to-work laws, which let workers opt out of paying union dues, bolstered the strategy. As carmakers from overseas set up factories in towns with more churches than traffic lights, assembly lines at Detroit's

"Big Three"—General Motors, Ford and what was once Chrysler—slimmed down. Today 30% of America's automotive jobs are south of the Mason-Dixon line.

Down South foreign firms honed what Stephen Silvia, author of "The UAW's Southern Gamble", calls America's "union-avoidance playbook". They put factories in places where workers lived far from each other, used questionnaires to screen out prospective hires sympathetic to organising—asking if they played school sports or served in the army to gauge their obedience to authority, for example—showed anti-union clips on break-room televisions and cosied up to pastors and mayors by donating to town fundraisers. For years that worked. The UAW's Bible Belt efforts failed repeatedly at Nissan, Toyota, Mercedes and Volkswagen.

Three things set the stage for this year's pivot. The first was a revamp of the UAW. After years of falling membership, the union's organising muscles had atrophied by the time Shawn Fain was elected president in March 2023. But once in office he sprang into action. By November strikes at the Big Three had led to record pay rises for hundreds of thousands of workers. Those left out of the deals looked on with new appreciation for what the union could do, and the union set its sights on tougher targets.

The second factor was Joe Biden's Inflation Reduction Act, his administration's flagship climate bill, which so far has spurred \$123bn of investments in green manufacturing. Nowhere is benefiting

more than the south-east, where over 100 projects have been announced. Mercedes is building a battery plant near Vance and Volkswagen has made Chattanooga its new electric-vehicle hub. More money and more jobs make it harder for the companies to leave, says Michael Gilliland, who worked on the Volkswagen union campaign. The flow of federal funds also makes firms less beholden to conservative state politicians.

Attention from Europe was the third catalyst for change. The president of Volkswagen's German works council, an employee group that works closely with management, urged workers in Chattanooga to unionise and reassured them that this would not put their jobs at risk. A new German law that punishes union-busting with fines of up to 2% of revenue could make corporate bosses in the South think twice about waging their usual war on organisers. In April the UAW filed a complaint to Germany's export-control agency alleging that Mercedes's actions in Vance had violated it. Though organisers at European firms may benefit from allies abroad, those at Asian ones like Hyundai, Kia, Nissan and Toyota may not.

Will the UAW's success in Chattanooga prove contagious? Opponents of unionisation are determined to prevent that. On April 16th six southern governors published a letter warning of the "ugly reality" that unions put "jobs in jeopardy" and that the UAW cares more about "helping President Biden get re-elected" than about workers. One week later Georgia passed a bill barring union-friendly firms from state tax relief. And Kay Ivey, Alabama's governor, instructed Mercedes in no uncertain terms to "fix" the problems that sparked the organising. (The company quickly replaced its American boss.)

The best or nothing

Before voting begins, supervisors in Vance are inundating workers with messages about the risks of unionising and pulling those they deem persuadable aside for one-on-one chats. Whereas Volkswagen mostly stayed mum, organisers say Mercedes is "100% in anti-union mode". Its pushback resembles a campaign Nissan ran in 2017, which fended off a years-long UAW effort in Canton, Mississippi.

Still, Jeremy Kimbrell, who has worked at Mercedes since 2000, is bullish. He reckons his colleagues at the luxury carmaker's highly profitable plant are finally fed up with what he calls "the Alabama discount". "Why do we get paid less?" Mr Kimbrell asks. "Because we're those dumb hicks down in Alabama," he answers. "They came down here because we do the same work for less and won't put up no fight." No longer. Regardless of who wins next week, southern organisers will fight on. ■

LEXINGTON

Class act

The meaning of the Republicans' Milwaukee convention



CONSIDERING THE recent pattern of American politics, the Republicans' choice to hold their convention this July in Milwaukee, Wisconsin, is no surprise. Barack Obama easily won the state twice, but in the other four presidential contests this century Wisconsin was decided by less than 1% of the vote. Hillary Clinton, who did not even campaign there in 2016 against Donald Trump, lost the state by 23,000 votes. In 2020 Joe Biden did not repeat her mistake. The Democrats planned their convention for Milwaukee, before covid-19 intervened, and in the end he carried the state, though by just 21,000 votes out of more than 3.2m. Wisconsin is among the handful of swing states this year.

But look a little deeper into the political past and the choice of Milwaukee, a manufacturing hub on the western shore of Lake Michigan, says something more profound about the evolving contest between Democrats and Republicans. For a century Wisconsin's dairy farmers and factory workers were at the leading edge of America's labour movement and its progressive politics. Wisconsin created the country's first progressive state income tax, its first unemployment-insurance scheme and its first workers'-compensation programme. Wisconsinites helped shape Franklin Roosevelt's New Deal and Lyndon Johnson's Great Society.

Although the city had never hosted a Republican or Democratic convention before 2020, it repeatedly hosted the Socialists. Milwaukee, which swelled with German immigrants in the second half of the 19th century, elected America's first Socialist member of Congress and first Socialist mayor of a big city, in 1910. They were pragmatists, not revolutionaries. As that congressman, an Austro-Hungarian Jewish immigrant named Victor Berger, put it, given the rights on offer in America it was "nonsense to talk of sudden bloody revolutions here, until the power of the ballot has been at least tried". Milwaukee's practical radicals became known as "Sewer Socialists" because of their passion for good government, including decent sanitation, parks, libraries and schools.

To Mr Trump, his competitiveness in Wisconsin is evidence that he has aligned the Republican Party with the interests of working people. "They say many of the rich people are with Democrats," he declared in early May at a rally in Waukesha, west

of Milwaukee. "We've become the party of the worker. We've become the party of the middle-income. It's done a whole flip." True to form, he overstates the case: a flip may be under way, but he has not completed the landing. Though Democratic candidates in Wisconsin have come to depend more on college graduates, most of their support is still from voters without a college degree.

But the biggest change in the composition of the Wisconsin electorate since 2012 has been an increase in the Republican advantage with white men who lack a college degree, from nine points to 23 points, says Charles Franklin, who conducts the esteemed Marquette Law School Poll. That shift began before Mr Trump appeared on the scene, under Governor Scott Walker, a more conventional conservative. The trend among white men flattened out late in Mr Trump's term, and it has not been enough to prevent Democrats from winning almost every statewide election in Wisconsin after 2016.

The most recent Marquette poll, released in mid-April, had Mr Trump ahead 51 to 49. On closer inspection it seems surprising that Mr Biden is even in the hunt. "Trump gets a lot of credit for having accomplished a lot as president, and Biden gets very little," says Mr Franklin. Mr Trump is seen as much more effective in handling the two issues Wisconsin voters care about most, the economy and immigration. Mr Biden has smaller advantages on the next two issues, abortion rights and Social Security and Medicare, and they are far less important to voters. But Mr Trump is weighed down by concerns about corruption and his temperament. As bad as much of that news is for Mr Biden, it suggests he has room to improve, if he can get word out about what he is doing in office. The election in Wisconsin will probably come down to independent voters who do not pay much attention until late in the race. In 2016 they broke to Mr Trump, and in 2020 to Mr Biden.

Back to the sewer

Borrowing from Roosevelt, Mr Trump closed his rally in Waukesha by promising that "the forgotten man and woman will be forgotten no longer". But to make the case for himself, Mr Trump relies on alternative history—had he remained president, there would have been no inflation, no war in Ukraine—and on Mr Biden's failure to increase security at the southern border. Mr Trump can point to few policy accomplishments on behalf of working people: no infrastructure plan, no "much better and less expensive" health-care insurance. "I have a hard time seeing a clear policy agenda that they push at the convention," Mr Franklin says. "I think he more embodies appeal to populism to working-class voters, rather than laying out some sort of agenda for how to improve working-class life."

By contrast, Mr Biden has specifics to cite, though he is struggling to move projects along so people feel their benefits. The federal government is pumping more than \$1bn into Milwaukee County to replace lead pipes, improve roads and more. Another \$1bn has been allocated to rebuilding a bridge from Duluth, Minnesota, to Superior, Wisconsin, over the largest port on the Great Lakes. In Racine, Wisconsin, on May 8th Mr Biden announced a \$3.3bn investment by Microsoft in a data centre at a site once touted by Mr Trump for a giant factory for Foxconn, before it drastically scaled back its plan. The words "sewer" and "socialism" may never come back into political fashion, but maybe the renewed competition for the allegiance of the working class is starting to revive the ethos they once represented. ■

The Americas



Latin America's gangs (1)

Mano nula

QUITO

The world's most violent region needs a new approach to organised crime

IN 2019 ECUADOR was a peaceful tourist destination. The homicide rate was under seven per 100,000, roughly the same as in the United States. By 2023 it was almost 45 per 100,000, making it the deadliest country in mainland Latin America, itself the world's most violent region (see chart 1). Durán in Ecuador, the world's most violent city, had a jaw-dropping murder rate of 148 per 100,000 last year. The country has been swept by a wave of organised crime, focused on smuggling cocaine from Colombia to Europe via Ecuadorian ports. The rest of Latin America is suffering too, as transnational criminal groups expand. Even sleepy Costa Rica and Uruguay are seeing increased violence.

In response, the region's governments (including Ecuador's) have become fond of *mano dura*, or iron-fist policies. These include calling states of emergency, indiscriminate mass incarceration, and sending the army onto the streets to keep order. Such tactics have received a boost from

their apparent success in El Salvador. In March 2022 the president, Nayib Bukele, declared a state of emergency after gangs killed 87 people in a single weekend. Since then, the government has thrown almost 80,000 people—over 1% of the population—into jail. The homicide rate has fallen to near-European levels, and Mr Bukele has become perhaps the world's most popular elected leader. In a referendum on April 21st Ecuadorians overwhelmingly backed tougher anti-crime measures proposed by President Daniel Noboa, including overturning a constitutional ban on the extradition of criminals, letting the army permanently patrol streets and prisons, and removing the possibility of early release for well-behaved inmates.

But while *mano dura* seems to have

helped El Salvador, it will not work in the rest of Latin America. Organised crime groups elsewhere are richer, better armed and more globalised than the ragtag outfits in El Salvador. A more patient, focused approach, led by the civilian police forces and the courts, is the best way to curb violence in the long run.

To see why, consider how violent organised crime has proliferated across the region. Gangs have built up increasingly lucrative and diverse portfolios. Production of cocaine has doubled in the past decade, while demand is rising worldwide, particularly in Europe. Synthetic opioids, human-trafficking, illegal mining and oil theft are all profitable, too. The allure of these revenue streams, combined with misguided state-security policies, has led to fighting between rival gangs and the fragmentation of criminal networks. The availability of powerful firearms, easily smuggled in from the world's largest legal gun market, the United States, makes the struggle more deadly. Impunity is rife (see chart 2).

These conditions increase violence, which in turn damages democracy and retards economic growth. Crime costs the region, on average, around 3% of GDP, reckons the Inter-American Development Bank: roughly what the region spends on infrastructure. This quickens a spiral of decline. Crime-blighted economies provide fewer chances for young men, making

→ ALSO IN THIS SECTION

26 When gangs rule

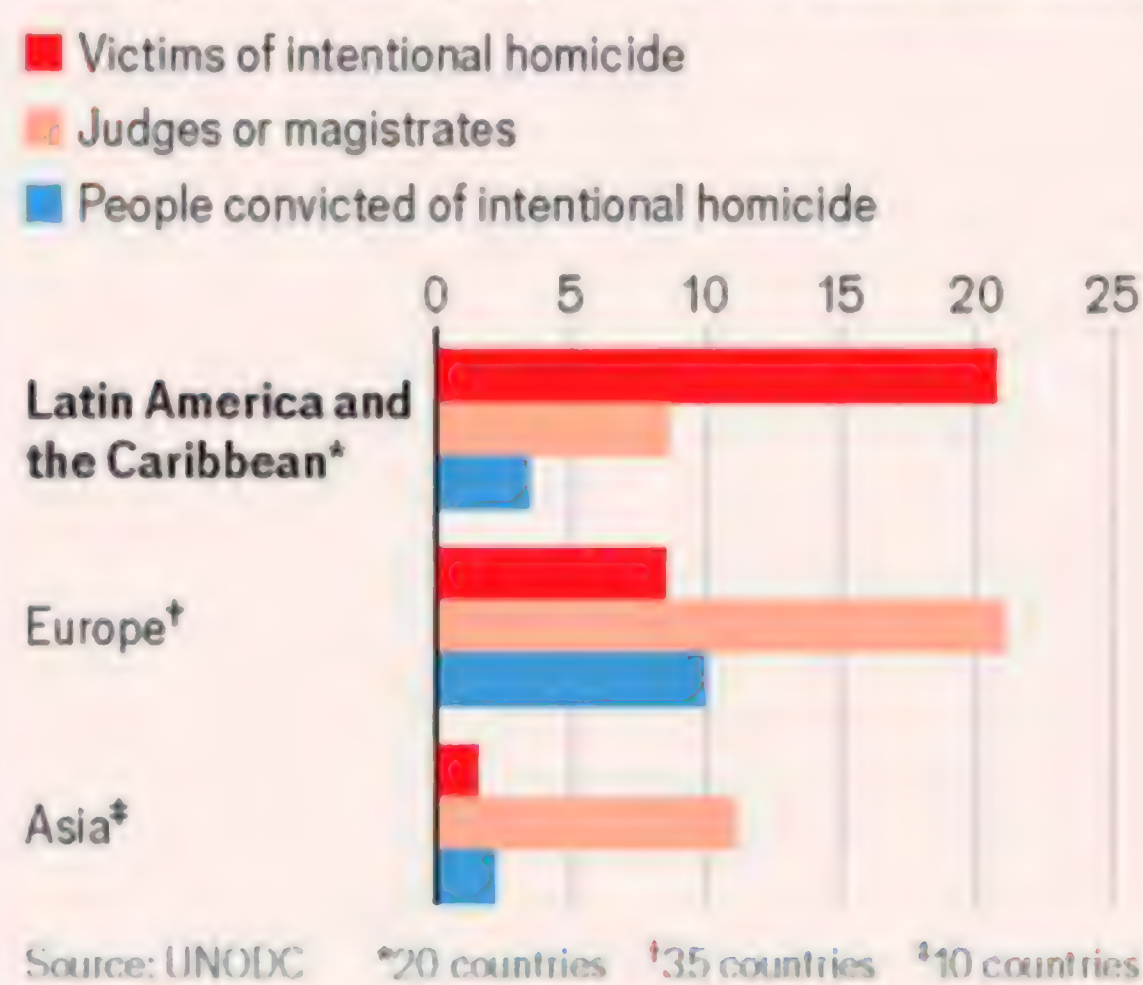
► criminal groups more attractive, perpetuating violence and heavier costs.

Mr Bukele's *mano dura* has worked—for now—because El Salvador's gangs were "poor and predatory", says Christopher Blattman of the University of Chicago. They relied heavily on extortion, taking over neighbourhoods and setting up checkpoints, charging anyone who wanted to pass. Murders soared as gangs scrapped over territory, even though returns were meagre. The average gang member made only around \$15 a week. Children were often recruited, sometimes by force, because they could be paid badly and were treated leniently by the courts. (Between 2010 and 2014, 219 children were killed travelling to or from school for refusing to join a gang.) The extortion business model meant gangs had to operate openly in the densest urban areas to maximise profits, so were easy to round up. Tattoos with gang insignia helped identify members.

Some of the initial decline in violence may have occurred because Mr Bukele bought the gangs off, irrespective of his *mano dura*. Court documents suggest that his administration brokered a secret pact whereby gang leaders got money, prostitutes and protection from extradition in exchange for supporting Mr Bukele's party in elections and reducing the murder rate (the government denies this). When the truce broke down, gangs carried out the weekend massacre and the president changed tactics, ordering a crackdown.

A deficit of justice

Rates per 100,000 people, 2021 or latest available



It is unclear how many gang leaders had escaped by then. In a recording obtained by *El Faro*, an investigative outlet, the government's lead negotiator speaks to a gang member shortly after the massacre and says he personally got a gang leader out of prison and drove him to neighbouring Guatemala. The US Treasury has placed sanctions on the negotiator and on El Salvador's prisons director.

Many of those in jail are low-ranking gangsters, or simply young men with tattoos. At least six leaders of the country's main gang, Mara Salvatrucha, have recently been arrested outside El Salvador and are awaiting trial in the United States.

Tired of violence, Salvadoreans have welcomed the crackdown. Homicides have

fallen from 53 per 100,000 in 2018 to 2.4 last year, according to government data. In February, after side-stepping a constitutional ban on re-election, Mr Bukele won a second term with 85% of the valid votes. He was then feted at the Conservative Political Action Conference, an annual powwow of the American right. Politicians have flocked to El Salvador to learn about the "Bukele model". Ecuador's clampdown has a whiff of it too, though Mr Noboa is more democratic.

The policy pillars of *mano dura*—mass incarceration and militarised policing—may be crowd-pleasers, but they create problems even as they appear to solve them. Take prisons. Gangs in the region have turned jails into "headquarters, recruitment centres and economic units", says Javier Acuña, a former adviser to Ecuador's prison bureau. Emiliano (not his real name), who recently got out of Latacunga jail south of Quito, the capital, related how prisoners could buy booze, sex and even drone-delivered fried chicken if they coughed up enough money or cocaine, the preferred currency. Watchtowers were not staffed; gangs turned them into arsenals.

Corruption, not correction

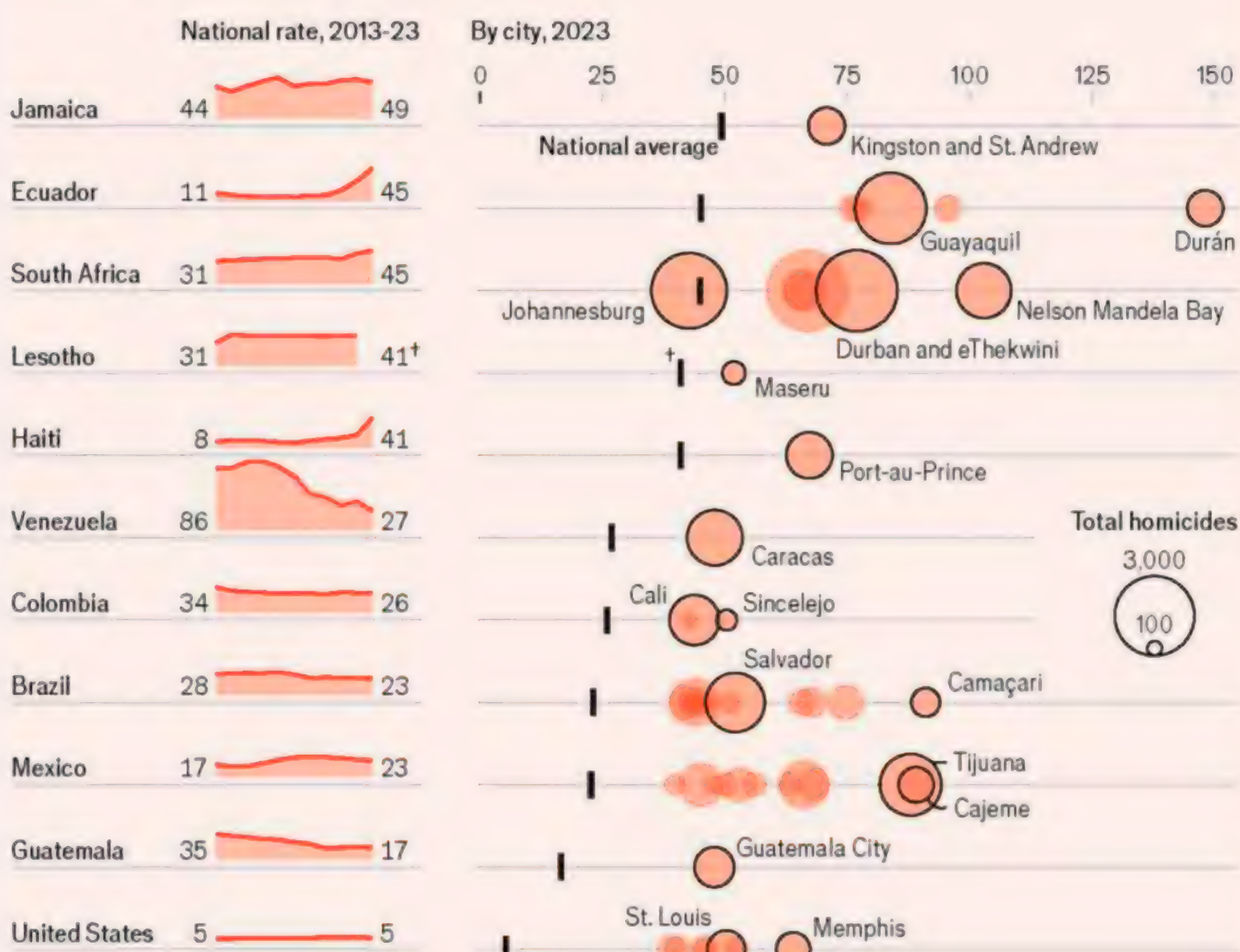
In these circumstances, putting more people in prison simply swells gang membership. Many inmates join a gang in order to survive. When João was jailed in the Brazilian city of São Paulo in 2008, the first inmate he met handed him a bar of soap, a change of clothes, a towel—and an ethics manual that banned rape and theft. The man was part of the First Capital Command (PCC), a gang founded after a police massacre in a São Paulo jail. João joined the PCC and quickly climbed the ranks. Though he has since left it, he says the PCC looked after him better than the state. Many inmates agree. As Brazil's incarceration rate ballooned, the gang spread. Today it is the biggest in South America, with links to the 'Ndrangheta, Italy's most powerful mafia, and to Balkan drug lords.

Giving policing duties to the army can also backfire. Armies are trained to defend states from foreign threats, not to do investigative work and fill out police reports. After Andrés Manuel López Obrador became Mexico's president in 2018, he disbanded the federal police and replaced it with a National Guard. He also increased the armed forces' budget by 150%.

The results have been disastrous. Mr López Obrador's six-year term was Mexico's bloodiest this century. Violence has blighted the upcoming elections, with 63 candidates and people connected to them murdered so far. The National Guard is incompetent. In 2018 the federal police seized some 2,500 kilos of cocaine. In 2022 the National Guard managed about half that, with three times as many people.

Murderous municipalities

Homicides per 100,000 people, 50 highest cities*



Sources: Igarapé Institute; United Nations

*With population of 250,000 or more †2022

Part of the idea of using the army is that soldiers are thought to be harder to corrupt than police or judges. Yet this may simply be because they spend less time with criminals. Once they run prisons and patrol streets, “there is no structural guarantee they won’t be bought off too”, says Jan Topic, a former Ecuadorian presidential candidate. In 2020 Salvador Cienfuegos, a Mexican general who was defence minister from 2012 to 2018, was arrested in the United States on charges of colluding with gangs. (He was released after Mr López Obrador kicked up a fuss. His lawyers say he is innocent and should never have been charged.) On April 30th Colombia’s president, Gustavo Petro, announced that thousands of weapons, including missiles, had “gone missing” from two military bases.

On top of the problems of mass incarceration and militarised policing, Latin America’s major criminal groups are richer and more powerful than the brutes who terrorised El Salvador. Mexico’s state-owned oil firm, Pemex, lost \$3bn to oil theft during Mr López Obrador’s time in office. Colombia’s most powerful gang, the Clan del Golfo, earns \$4.4bn a year not just from drug exports, but also from people-trafficking, extortion and illegal mining, according to the International Crisis Group, a think-tank. Parts of the Amazon have become more lawless as gangs battle over wildlife-trafficking, illegal logging and gold mining. Whereas El Salvador’s gangs sucked money out of their communities, these businesses create jobs and generate cash.

The limits of force

International co-operation makes Latin America’s gangs more powerful, too. In 2016 Colombia’s FARC guerrillas, which had controlled the cocaine trade in neighbouring Ecuador, signed a peace deal with the government and stood down. This left a vacuum just as the cocaine market was exploding. Spying an opportunity, Albanian mafia groups, dissident Colombian guerrillas and Mexico’s rival Sinaloa and Jalisco New Generation gangs all muscled in. They subcontracted Ecuadorian gangs, often paying for cocaine shipments with military-grade weapons. Ecuador’s murder rate surged. No single state can defeat the gangs operating in their country because they operate in all of their neighbours’ territories too.

In the face of these challenges, Ecuador and other Latin American countries in the grip of gang violence would do better to home in on the most savage individuals rather than trying to dismantle all organised crime gangs at once. A targeted approach, known as focused deterrence, means leaving the less bloody groups alone. “No police force in the world has the capacity to go after everything at once,”



says Rodrigo Canales of Boston University. “But when you focus on extreme violence you can make the group’s life miserable. The whole group becomes invested in lowering violence.”

When Claudia Sheinbaum, the front-runner in Mexico’s presidential election, became mayor of Mexico City in 2017, she invited police and academics from the United States (including Mr Canales) to test focused deterrence in a neighbourhood called Plateros, with 260,000 inhabitants and a homicide rate of 22 per 100,000. They brought together police intelligence, the attorney-general’s office and social services, and scrutinised fatal shootings.

The team identified 25 men who were very likely to kill and in turn be killed, then offered them a mix of carrots and sticks. Carrots included mentoring and, in extreme cases, relocation. The stick was that the men knew they were being constantly watched and would be found quickly if they committed a crime. The team also created a database which plots homicides and gunshot injuries against the five-year

average in Plateros and similar neighbourhoods nearby. By 2023 Plateros was down to nine murders per 100,000 residents.

In the short term, focused deterrence may reduce violence. But it could also let gangs consolidate. Peace means residents are less likely to snitch and the state more likely to leave gangs alone. The most successful criminal groups prefer peace to war. São Paulo became safer after the PCC won a monopoly of force. In the Colombian city of Medellín, homicides plummeted after high-level gangs reached a pact in 2009. Municipal Mexican data suggests that high levels of gang saturation can lead homicides to taper off (see chart 3).

That is why longer-term solutions are needed. Once the level of violence is stable, states should focus on hurting gangs’ income by imposing heavier costs. This means purging institutions of corrupt officials and bolstering or creating specialised units to track money-laundering and arms-trafficking. Between 2016 and 2020 there were only 12 convictions for money-laundering in Ecuador. In 2022 the government created a special unit to tackle corruption and organised crime. The attorney-general, Diana Salazar, is leading a bold probe into the police, politicians and magistrates who collude with gangs.

Ultimately, states must focus on reducing gangs’ recruitment and publicising the grim realities of membership. The world homicide rate for men aged 15-29 is 16 per 100,000; in Latin America it is 60. Schools, where children are often recruited, must be the starting-point. A paper published last year in *Science*, a journal in the United States, estimates that if the gangs’ rate of recruitment in Mexico were halved, deaths would drop by half too. In the long run gangs have more to fear from the likes of Ms Salazar and a nanny state than from strongman clampdowns. ■





Latin America's gangs (2)

Deliver us from evil

SAN ANTONIO, COLOMBIA

In parts of rural Colombia gangs are the de facto state. They enforce social conservatism though grisly means

MARÍA ÁLVAREZ (not her real name) is a devout Catholic. She was relieved last year when the Ismael Ruiz gang, an offshoot of the Revolutionary Armed Forces of Colombia (FARC), set up operations in her rural home town of San Antonio. They promised to end what Ms Álvarez calls “immoral behaviours”. Then, two months ago, the gang ran her son out of town. They disliked his motorcycle stunts, long hair and earrings. She misses him, but maintains that “social cleansing prevents people from stealing from hard-working people like us, and it helps to make sure our young people behave.”

Most Latin Americans abhor the scourge of organised crime and support harsh crackdowns. This accounts for the remarkable popularity of Nayib Bukele, El Salvador's president, who has used mass incarceration and the army to bring what had been one of the world's highest murder rates down to near that of Canada. But there are pockets of Latin America, particularly in rural areas, where gangs have become popular and act as the de facto state. Some 14% of Latin Americans (80m people) say criminal groups provide order and reduce crime in their communities.

People most admire gangs because they are better able than elected governments to impose strict social control. Daniela Castillo Aguillón, a former government official working on Colombia's peace process, says the country is socially conserva-

tive and permeated by sexism and stigmatisation of transgender people, prostitutes and drug takers. “Certain criminal groups promise a society free of all of that, and of people like that,” says Ms Castillo.

In San Antonio and other parts of Colombia, gangs threaten or even kill thieves, drug-dealers, and sex workers who are found to be infected with sexually transmitted disease. When your correspondent visited the rural province of Tolima, a local showed her a pamphlet: “Do not be in the streets on Saturday between 4pm and Sunday 6am. We will do a social cleansing.”

In 2016 Colombia's government signed a peace agreement with the country's largest rebel group, the FARC, after over half a century of guerrilla warfare. Yet the deal left a power vacuum in many parts of the country—in places like Tolima—that was not filled by the state. New gangs flooded in, creating a deadly kaleidoscope where more than 190 groups struggle for control.

When gangs consolidate power, locals can start to see them as an attractive alternative (or complement) to the government. In a 2019 survey of 7,000 residents in Medellín, Colombia's second city, most people said they had paid an extortion fee. In exchange, gangs offer dispute resolution and other services, and are easier to contact than the police or the mayor's office. Only 46% of respondents said their neighbourhood would be better off without the gangs. Business owners disapproved of ex-

tortion, but disliked municipal taxes more.

Juan Carlos García Granada, a former guerrilla fighter from an arm of the FARC called Frente 21, which signed the 2016 peace deal, worries about social cleansing. That is because peace signatories and other social leaders are among those first in line. The people doing the “cleansing” are often FARC dissidents who didn't lay down arms, and feel betrayed by their former comrades who did. “They kill and threaten our colleagues,” Mr García Granada rages. Almost half of the human-rights workers killed around the world last year perished in Colombia, according to Front Line Defenders, a human-rights organisation. This makes it the deadliest country in the world for such work.

Similar tactics are deployed in Mexico. The Sinaloa gang has reportedly hung banners in the city of Culiacán—which was for years the operating base of the now-jailed drug lord Joaquín “El Chapo” Guzmán—prohibiting the trafficking, sale and production of fentanyl, a synthetic opioid that killed more than 70,000 people in the United States last year. In March the group plastered bridges with posters announcing that the leaders of the gang do not allow theft, kidnappings and extortion in the community. Enforcers threaten, kidnap or murder those who disobey.

But the Sinaloa gang is also known for doing good in its community through what is sometimes called narco charity. Gangs build schools or churches, and sometimes throw parties for locals. Ecuador's biggest gang, Los Choneros, paid for a Christmas party in December, complete with people dressed up as Mickey Mouse and fairies, who handed out toys to children. Such actions aim at winning hearts and minds. In Mexico, *narcocorridos*, or ballads that glorify drug lords, are popular.

Dancing with the devil

Even the Mexican president, Andrés Manuel López Obrador, seems to view Mr Guzmán as a Robin Hood figure. He has visited Badiraguato, Mr Guzmán's home town, several times. In 2020 he shook hands enthusiastically with the gangster's mother. Mr López Obrador's team was accused of taking money from drug lords during his first presidential campaign in 2006, in return for a promise to tolerate them (Mr López Obrador denies this). Mexico and Colombia have some of the highest recorded levels of impunity in the world; 95% and 94%, respectively, of reported crimes do not lead to a conviction.

Latin Americans want to feel safe. Where criminal groups do a better job of providing that feeling than governments, many are willing to welcome their rule. That is certainly what Ms Álvarez continues to believe, even after her own child was chased away from home. ■

Asia



Singapore (1)

The 4G era begins

SINGAPORE

An interview with Lawrence Wong, Singapore's incoming prime minister

SINGAPORE IS COMING under new management. Lawrence Wong, the finance minister and deputy prime minister, will take the reins of the city-state's government on May 15th. The country does not churn through prime ministers: he will be just the fourth in its history as an independent country since 1965. Mr Wong sat down with *The Economist* on May 6th.

Aged 51, Mr Wong was born seven years into Singapore's existence as a nation. He is also more of an everyman than his predecessors. He is the first not to have attended an elite secondary school, and grew

up on a public-housing estate.

His ascendancy marks a historical change in other ways. Lee Kuan Yew, the country's founding father, was prime minister until 1990. His eldest son, Lee Hsien Loong, took the reins in 2004. For the first

→ ALSO IN THIS SECTION

28 Singapore's success story

30 Banyan: The war in Gaza

31 Ports in India

time in the country's modern history, there is no member of the family either in charge or waiting in the wings to take over. Instead Mr Lee will remain in cabinet as senior minister, the same position conferred on his father after he stepped down as prime minister.

As a small and open economy, with large trade and financial links to the world, Singapore is buffeted by geopolitical forces more than most countries (see next story). Mr Wong compares two recent shocks and their effect on Singapore. Russia's invasion of Ukraine, he notes, had a financial impact on Singapore. The country was alone in South-East Asia in instituting sanctions against Russia. Even without them, the hit to global energy prices had a big effect, as Singapore imports all of its commodities: wholesale electricity prices there rose by almost half in 2022.

Enter the next generation

But while the economic impact was significant, the conflict has little emotional resonance in a country with limited links to either of the countries involved. The violence in Gaza, on the other hand, has little economic impact on the country, but is an issue of deep concern for many Singaporeans, especially the country's Muslim minority (see Banyan).

By contrast, the greatest geopolitical risk on the horizon—a military conflict in the Taiwan Strait or in the South China Sea—would have both a very large economic effect and a large emotional resonance for Singaporean citizens, Mr Wong notes. Singapore supports the status quo when it comes to Taiwan's status, he stresses: "If any change were to happen, it has to be done in a way that's peaceful." The majority of Singapore's citizens are ethnically Chinese. Many still have family connections in the mainland, or feel a sense of kinship to the country of their ancestors. "External events that happen seemingly far away, actually they are happening right here at our doorstep," he says.

The risk of military conflict in particular speaks to Singapore's delicate diplomatic balancing act between America and China. Mr Wong stresses that Singapore is not an ally of America, despite the two countries' close military links. The country has the second-largest number of military personnel based in America of any country in the world. But as relations between Washington and Beijing have worsened, remaining open to both of the two larger countries becomes more difficult. "When a big country deals with a small country, the big country often doesn't realise how imposing they are," he says.

An area where Singapore's government »

► stands out from the Western world is its management of the ethnic balance of its citizens, known as the Chinese-Malay-Indian-Others model. The city attempts to keep its proportions—roughly 75% Chinese, 14% Malay and 9% Indian—relatively constant over time. Balances are also reflected at the level of the city's widespread public-housing estates, which are not permitted to stray too far from the country's ethnic make-up. "We would like to be, to evolve into a society where we become race-blind, but we are also very realistic about these things," he says.

Over the past six decades the ruling People's Action Party (PAP), of which Mr Wong is a member, has made the case that the external dangers to Singapore justify its firm governance of the city. But in general elections in 2020, the centre-left Workers' Party won two of the country's multi-member constituencies, a first for any opposition group in the country's history. Those precincts have historically guaranteed that the PAP's vote share of over 60% is turned into even more overwhelming parliamentary majorities. "While a majority today would like the PAP to be in power...they would also like to see more opposition voices in parliament. So the opposition presence in parliament is here to stay," says Mr Wong.

One area where Singapore is changing is in the priorities of its young people, the issue on which Mr Wong is at his most animated. "They would like to see a Singapore where we embrace broader definitions of success," he says. The island is famous for a hard-working culture, and the city's meritocratic ladder can be ruthless.

But any Singaporeans angling for a split with the political past will be disappointed. Mr Wong casts the decision to keep Mr Lee on as cabinet minister as a Singaporean tradition, and a way of hanging onto the experience accumulated by the third generation of Singapore's leadership. He mentions the outgoing prime minister's international networks, a hint at the role Mr Lee might play in the future.

Mr Wong frames the challenge of his time in office as continuing the work of his predecessors. "We've always seen ourselves as the underdog, we will always be the improbable, unlikely nation forged only through the collective will of our people," he says. "My mission is to keep this miracle going for as long as I can." ■

➔ Read more and listen online

To read the full transcript of our interview with Lawrence Wong, please go to economist.com/asia. The interview will also be featured on our Money Talks podcast and The Intelligence podcast, which can be accessed through Economist Podcasts+

Singapore (2)

The view from the top

SINGAPORE

The city-state has achieved astounding economic success. Can it last?

SINCE ITS independence almost 60 years ago, Singapore has become a beacon of prosperity. In a part of the world where middle-income status is the norm, the city-state is now the richest country for many thousands of miles in any direction. At around \$88,000, its GDP per person has doubled in real terms over the past 20 years. At the moment of its independence in 1965, the country was poorer on the same basis than South Africa or Jordan.

But as the world looks at globalisation with increasing scepticism, balancing Singapore's domestic politics against its role as a global city will become trickier. "The established norms are eroding," says Lawrence Wong, Singapore's incoming prime minister, speaking to *The Economist* on May 6th (see previous story). "People are searching for new bearings, but the new order is not yet established. I think it will be messy for quite a few years, maybe a decade or longer."

By any measure the country's economic record is impressive. During the past two decades, the median wage for Singaporean residents in full-time work has risen by 43% in real terms, compared with an 8% rise in America. At around \$46,000, the median full-time wages of Singaporeans are now higher than those in Britain, the country's former colonial boss, where they sit at around \$44,000.

Singapore's stature as a financial centre has risen in recent years, leading to inevitable comparisons with Hong Kong, once the undisputed leader among Asia's global cities. Indeed, the country seems to be outstripping its rival. The city-state maintains a solid lead in salaries, which are around 50% higher for Singaporeans than Hong Kongers. As a hub for wealth it is growing far faster than its competitor: in 2017, Singapore boasted \$2.4trn in assets under management, according to the Monetary Authority of Singapore, about three-quarters the size of Hong Kong's \$3.1trn. By 2022, Singapore's pile had grown to \$3.6trn, just 8% behind Hong Kong.

Despite Singapore's growing success as a financial centre, policymakers do not crow about its success. They fret rather than cheer about the idea of Hong Kong's erosion as an international hub. In 2019, during Hong Kong's massive pro-democracy protests, the Monetary Authority of Singapore struck back against reports that the city was the beneficiary of capital flight

from Hong Kong. Even so, as a result of Hong Kong's weakened reputation, Singapore has become more important as a hub for Chinese wealth.

It is not just the private sector's holdings that have bulged. Singapore's state-owned investment company, Temasek, had \$287bn in assets as of March 2023. The country's Monetary Authority manages around \$369bn in foreign-exchange holdings, gold and other reserves. Singapore's GIC, previously known as the Government of Singapore Investment Corporation, does not disclose its holdings, which the government only concedes are above \$100bn. But by the estimates of Global SWF, a data firm, the GIC's assets are the largest of them all, running to \$769bn. If correct, that would make the sovereign wealth fund the sixth-largest in the world, outstripped only by a handful of petro-states and by China's two funds. It would also mean that Singapore's state-owned assets run to over 270% of its GDP, an enormous hoard.

These large sums illustrate an economy that saves far more than it spends. Singapore also has one of the largest current-account surpluses in the world. As a small country and a close partner of America in security, Singapore avoids the scrutiny others might endure for its huge savings and managed exchange rate. The fact that America has a bilateral trade surplus with Singapore tends to keep it out of the glare of protectionist American politicians. But the country briefly landed on America's watchlist for currency manipulation under the administration of Donald Trump. If he triumphs in November's election, Singapore runs the risk of returning to the crosshairs of America's trade warriors.

International opprobrium is a less immediate concern than domestic pressure. ►►



Building up better?

► Since the ruling People's Action Party (PAP) won 83 of the 93 seats in the Singaporean parliament in 2020, it would be easy to presume that it has little to worry about from the opposition. But the clutch of seats held by the centre-left Workers' Party is the largest presence for another party in parliament since independence. Before 2020 there was no leader of the opposition in Singaporean politics. By the standards of a Western democracy, the dominance of the PAP is still overwhelming. But the presence of competition has changed the calculus: it has made the government more focused on public consultation before pulling the levers of policy.

The opposition has different views on how the city-state should be run. Its lawmakers have called for a higher share of the returns on the assets to be remitted to the budget and used for everyday spending, rather than the 50% currently permitted. They also argue for greater transparency when it comes to the make-up of the reserves and the total held by the GIC.

The government reckons the idea of putting the reserves at risk would be a sop to populism. It argues that the country is ageing, and at its present income levels it will never go through a similar period of rapid growth as when the assets were accumulated. The bull markets which produced strong returns for riskier investments, like Temasek's 20-year returns of 9%, may never be so favourable again.

Strait and narrow

But the cost to Singapore's public finances as the country ages will have to be funded somehow. The proportion of Singapore's citizens who are over 65 rose to 19% last year, from 12% a decade ago. It will rise to almost 25% by the end of this decade. Social spending has roughly doubled in the past decade, and state spending on health care now outstrips the education budget. Singapore's low level of government spending, the envy of small-state advocates the world over, is climbing: it will reach 20% of GDP by 2030, from 14% in 2010. Tax increases are likely. A sales tax has already risen: the levy has climbed from 7% to 9% in the past two years.

Meanwhile the country's changing demography will make itself felt in other ways, too. In 2023 Singapore's fertility rate fell to just 0.97, a figure below all but a small handful of countries in the world. The Singaporean government does not publish detailed population forecasts regularly, but UN projections suggest that without immigration Singapore's working-age population would drop by a third between 2022 and 2050.

Immigration is controversial in Singapore. The share of the city's population made up of its own citizens has dropped from 74% in 2003 to 61% last year. The city

Leader of the pack

GDP per person, 2023, \$'000
Selected economies



has four official languages and three official ethnic groups, of which Chinese are by far the largest. The government tries to keep this balance. Ethnic Malays, who are mainly Muslim, are a minority in Singapore but a majority in Malaysia and Indonesia, its far larger neighbours. So Singapore's restrictions on speech are tightest where religious and racial sensitivities are touchiest. Even for a political force as dominant as the PAP, high levels of migration seem a political threat.

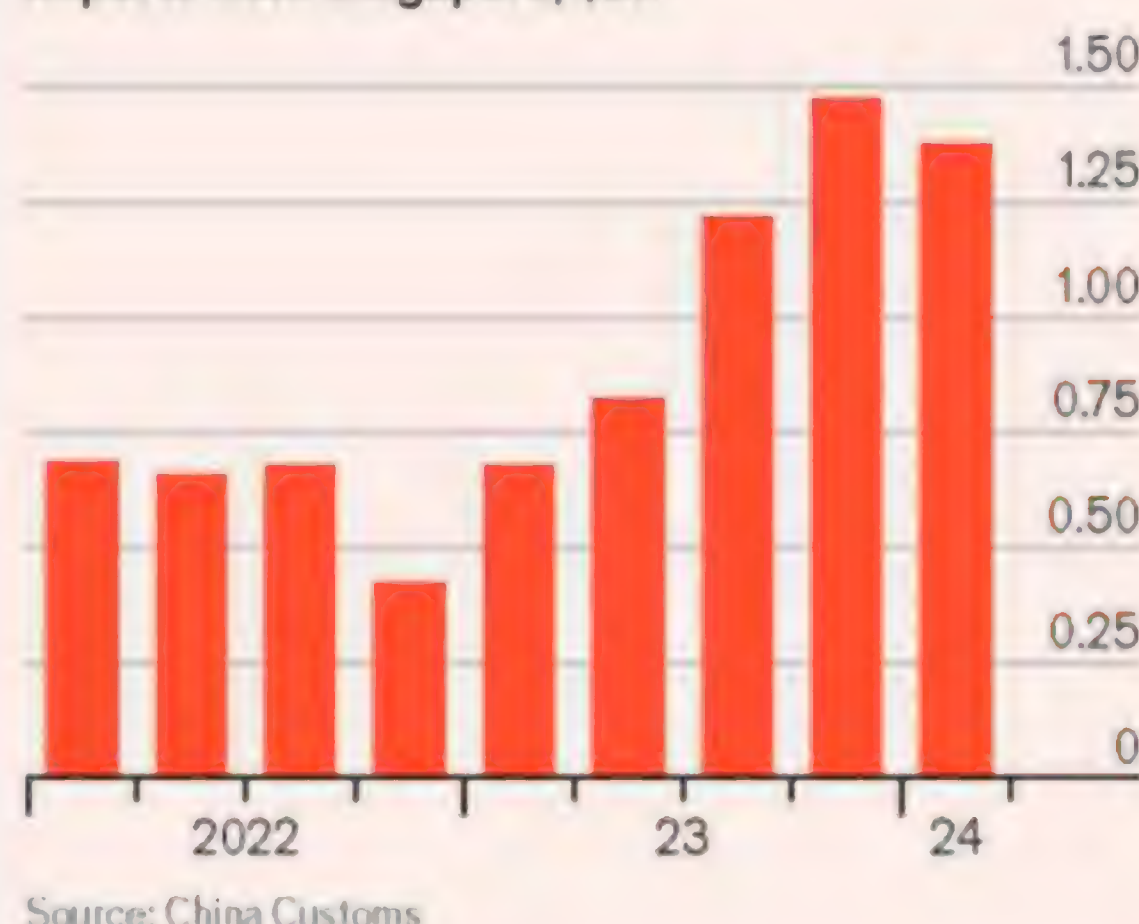
Mr Wong notes that Singapore will continue to need foreign workers. "We welcome foreign professionals to work in Singapore, but it's controlled, because if it's not controlled I think we will be easily swamped," he says. "We cannot afford to be like the UAE, where the local residents are only less than 10% of the population." He says he could not imagine a situation where Singapore's citizens are a minority.

Balancing the needs of big international companies and Singaporeans' wariness of immigration will be an increasingly delicate task for the government. In a survey published in 2021 by the Institute of Policy Studies, a unit of the National University of Singapore, 44% said that immigration increases unemployment, a figure that rose to over 50% among respondents over 65.

However, the greatest of all the threats

Conscious coupling

China, semiconductor-equipment imports from Singapore, \$bn



to Singapore's enviable position are those outside the control of the city-state. It sits on the Strait of Malacca, a bottleneck for trillions of dollars in global trade. Its trade volumes run to an enormous 337% of its GDP, compared with 27% in America and 68% in rich countries across the world.

The fraying of relations between Beijing and Washington is a particular worry. Singapore is heavily exposed to both countries. In the worst-case scenario, in which trade is split between two global blocs—between those countries which voted to condemn Russia's invasion of Ukraine at the UN General Assembly in 2022, and those which did not—Singapore's GDP would decline by around 10%, compared with 3% for Asia or 1% for the world.

China is not only Singapore's largest source of imports, as it is for most countries in the world, but its largest source of exports too. Almost all East Asia's energy imports flow through the Strait of Malacca, and much of its manufacturing trade flows the other way.

Geopolitical dot

At the same time, America remains by far the largest single investor in Singapore, with \$574bn (\$428bn) invested in the country at the end of 2022, compared with 156bn from mainland China and Hong Kong combined. According to the American Chamber of Commerce in Singapore, American firms employ over 200,000 people in the country, about 6% of the workforce. Singapore is also America's closest security partner in South-East Asia, despite its neutral diplomatic stance.

America's increasing restrictions on China's semiconductor industry could embroil Singapore in the spat between the two countries. Its chip industry does not specialise in the most advanced nodes, where Taiwanese firms predominate. But it does well in producing older chips, known as mature nodes. America's Department of Commerce has said it has no plans to extend its restrictions and sanctions to older chips. But China's massive expansion of its legacy chipmaking may change that. In the second half of last year, Singapore's chipmakers sold around half a billion dollars' worth of equipment a month to China, a figure that is more than double the same period in 2022 (see chart 2).

Mr Wong says the government recognises America's prerogative in export restrictions where national security is concerned, but hopes they are carefully calibrated. Jake Sullivan, the national security adviser in President Joe Biden's administration, has spoken of a small yard with a high fence, referring to controls imposed on a small number of high-tech industries. "If you start expanding the yard," Mr Wong says, "and the yard keeps getting bigger and bigger...I think that will be det-

► rimental not just for Singapore but for the US and for the whole world.”

For the country's anxious bureaucrats, the idea of planning for a full-scale split between America and China is a ghastly prospect. Singapore hosts the global headquarters of TikTok. In January its CEO, Shou Zi Chew, a Singaporean, was grilled by American lawmakers, who even asked him if he had applied for Chinese citizenship, or had been a member of the Communist Party of China. Clips of the ques-

tions, and Mr Shou's befuddlement, went viral in Singapore and abroad. It showed how hard it is to straddle the two worlds.

Of all the varied economic risks facing Singapore, one underpins the lot—and bugs the city's watchful administrators. What happens if Singapore, like Britain or other slow-growing European countries, entered a period of stagnation in which ordinary household incomes stop rising? That sort of pressure would threaten the contract between the PAP and the Singa-

poreans, who vote for them in extraordinary numbers in the expectation that they will continue to get richer.

Before November next year, Mr Wong will lead the PAP to a general election, the results of which will frame his time in office. Singapore's successes give its new government a great deal to preserve. Few countries have managed to surf the wave of globalisation so competently. With the tide now quickly going out, Singapore faces its greatest challenge. ■

BANYAN

A delicate balancing act

In Malaysia, Indonesia and Singapore, Gaza is a very local problem

FAR MORE than Russia's invasion of Ukraine, the war in Gaza is rattling public opinion in three key South-East Asian countries: Malaysia, Indonesia and Singapore. The first two have Muslim-majority populations, and Singapore, largely ethnic-Chinese, has a Muslim minority of 16%. As on campuses in America and in street protests in Europe, the sympathies among those who are concerned about the conflict—and who in Singapore include many young non-Muslims—are for Palestinians suffering from Israel's heavy-handed prosecution of the war.

Strong feelings have thus made the war a political challenge in ways that are connected, but also vary from country to country. Malaysia's prime minister, Anwar Ibrahim, is by far the most strident leader in South-East Asia in support of the Palestinians. Mr Anwar has decried what he says was Western pressure to condemn Hamas, the hardline group ruling Gaza that started the war with a brutal raid on Israel.

While Palestine maintains an official embassy in Kuala Lumpur, Hamas can boast an unofficial one. Mr Anwar's government has banned Israeli ships from docking. Politicians join rallies against the West's backing of Israel.

Mr Anwar's stance is no surprise. He has long espoused Palestinian independence. Malaysia itself has refused to recognise Israel. Meanwhile his chief challenge comes from PAS, an ultra-conservative Islamic group and the largest party in parliament. He cannot afford to let PAS outflank him on religious issues, or he loses power.

For now Mr Anwar sees little downside in his pro-Palestinian, anti-American stance. His government, keen on Western investment, says it is open for

business. Yet more stridency may make investors wonder. As it is, Malaysia's religiously tolerant ethnic minorities are growing more uncomfortable with the increased religiosity that the Gaza war has helped feed.

In Indonesia feelings also run high. Yet the rhetoric among political leaders is relatively restrained. True, the government of Joko Widodo has condemned Israel's imminent offensive on Rafah, Hamas's last stronghold. And, in a recent opinion piece for *The Economist* that was widely cheered back home, the president-elect, Prabowo Subianto, condemned the West for caring more about Ukrainians' fate than Palestinians'. Yet that is tame stuff compared with Mr Anwar: unlike Malaysia's denial of Israel, Mr Prabowo calls for talks and a two-state solution.

What factors explain the difference? Indonesia's ties with Israel are closer than the elites like to let on. They include purchases of Israeli tech and weaponry. Before the war, secret talks looked likely to establish ties between the two countries, starting with reciprocal trade offices.



Although Mr Prabowo denies Islamists' claims that he is chummy with Israel, he is in little danger of being outflanked by hardliners, having absorbed key Muslim political groupings in his coalition. Domestic considerations count.

Squeezed between Indonesia and Malaysia, Singapore has close security ties with Israel—two small states encircled by danger. Yet Gaza greatly complicates the relationship, on account of domestic feeling. As Lawrence Wong, the incoming prime minister, told *The Economist* this week, even though the war in Ukraine carries economic consequences for Singapore, at an emotional level it resonates little.

By contrast, though Gaza has had negligible economic effect, it has had “a much higher level of resonance”, given the plight of Palestinians. The concern is that communal tensions might surface in ways that strain Singapore's famed social and religious harmony. That, says the government, is why pro-Palestinian demonstrations have been banned. Christians, who are generally pro-Israel and account for 19% of the population, would demand their own protests, thereby bringing religious discord into the open. The government also fears that Malaysian stridency could cross the bridge that joins the two countries and foster extremism in Singapore.

The necessary response, Mr Wong says, is “to go out [and] explain to our people the positions that Singapore has taken”. That includes condemning Israel's heavy hand, urging for a ceasefire and a two-state solution and providing aid to beleaguered Palestinians. Those steps are surely right in themselves. But in South-East Asia, when dealing with a distant war, never ignore factors that are close-to-hand.

Indian infrastructure

Out of the blue

NHAVA SHEVA

India has quietly transformed its ports. That augurs well for trade—and for reform

IF THERE IS one thing about which both supporters and critics of Narendra Modi, India's prime minister, can agree, it is that his biggest achievement has been to overhaul India's infrastructure. Tens of thousands of miles of motorways have been built, fast intercity trains have been waved off, dozens of urban metro lines have opened and more Indians fly on more aircraft through more airports than ever before. These are impressive feats.

There is deeper transformation going on behind the scenes, too, in sectors with which most Indians have no direct contact but which affect their lives all the same. One of these is ports, which have seen huge improvements in capacity and efficiency. This is crucial for India's economic aims: Mr Modi's government harbours ambitions of making India a manufacturing and export hub as well as a node in global supply chains. World-class ports are necessary to realise those goals. The maritime sector accounts for 95% of India's trade by volume and 65% by value.

Enormous progress has been made. At what the government classifies as its "major ports"—a dozen of them—capacity has more than doubled in the past decade from 745m tonnes to over 1,600m. Traffic at these ports (see map), which handle more than half of India's trade, jumped by 46% to 795m tonnes in the ten years to 2023. Turnaround time, or the number of hours between the arrival and departure of a cargo ship, has plummeted from 127 hours in 2010-11 to 53 hours ten years later (see chart). India rose from 54th in the World Bank's "logistics performance index" a decade ago to 38th last year.

For an example, look to Nhava Sheva, across the harbour from the old docks of Mumbai, India's commercial capital. The Jawaharlal Nehru Port Authority (JNPA) was commissioned in 1989 as a modern facility to handle high-volume container traffic and take lorries off the streets of the city. It is India's most efficient public port. Turnaround times average around 21 hours, even though it accounts for half of India's container traffic and a quarter of the customs revenue at major ports.

The sea-change at JNPA and other public ports is a result of three important policies. In 1996 the government allowed the private sector to participate in building and running ports. At the same time it encouraged public ones to move to a "land-



lord model", with the port authority providing common services such as tugboats and pilots while leaving cargo operations to private firms. Today JNPA's five container terminals are all run by private operators, including Dubai's DP World and Denmark's Maersk. Others among the major ports have followed suit. Private competitors such as Mundra, run by the Adani conglomerate, have forced public ones to improve their standards too. "The days are gone when the chairman and traffic-department heads made the shipping lines wait outside," says B. Swaminathan of the Indian Maritime University in Chennai.

Second, the transport upgrade has been backed up by less visible changes. India's port-planning used to revolve around ensuring enough capacity to import grain to

feed its people, says Unmesh Sharad Wagh, JNPA's chairman. But in recent years the focus has shifted to logistics. Electronic tolling and a national tax regime have made moving goods easier and faster. One of two new rail lines intended solely for freight is complete. The government aims to cut the cost of logistics from around 8% of GDP to 5%.

The third element is modernising India's customs department. At JNPA 90% of consignments are not physically inspected and more than 80% are cleared without the need for scans. The goal, says Rajesh Pandey, the chief commissioner of customs at JNPA, is to raise that second number to 90%, speeding up the movement of goods.

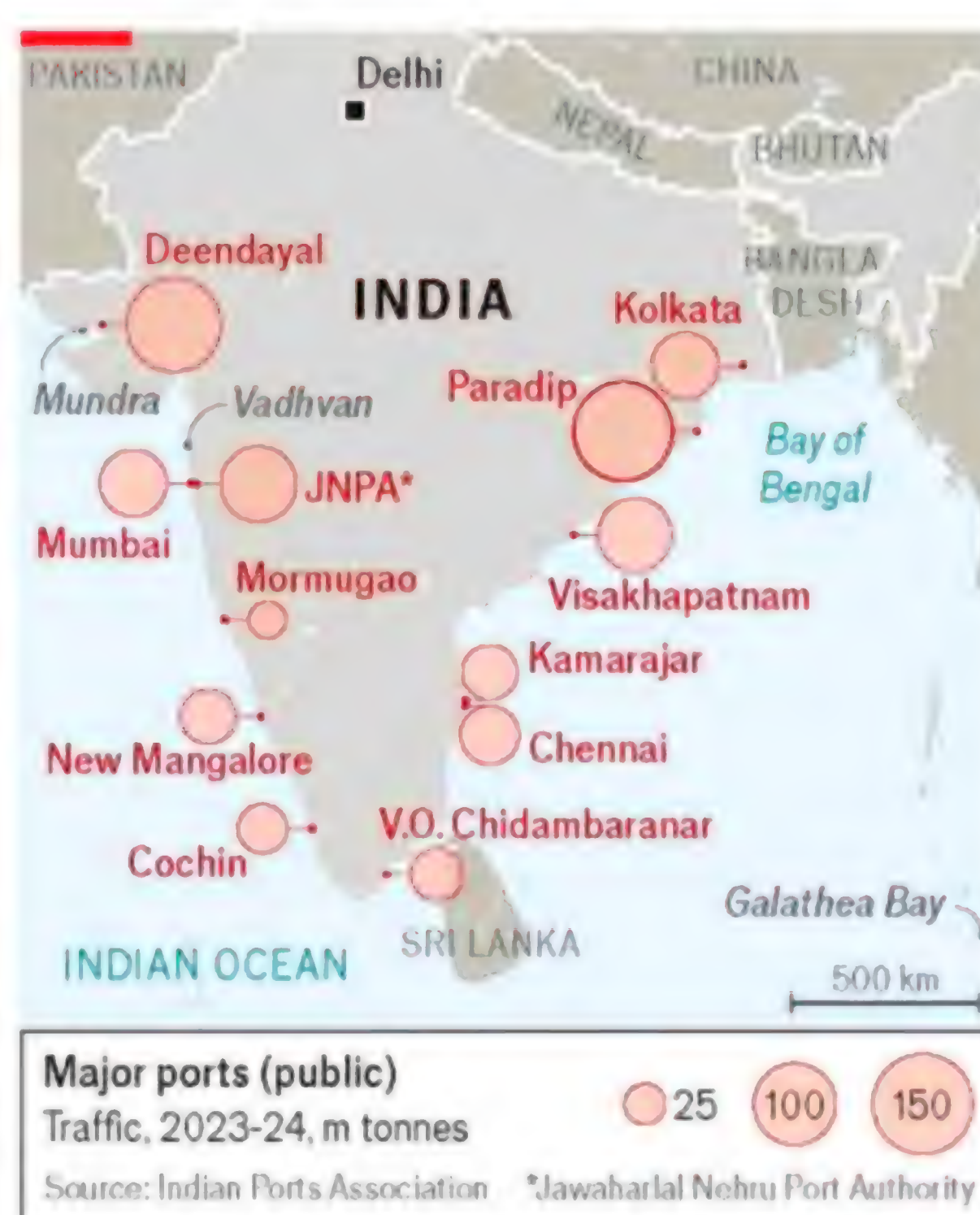
Deep thoughts

India's maritime industry still punches below its weight globally. Despite some 7,500km of coastline and over 200 ports, the country accounted for only 2.4% of global container traffic in 2021. That is about the same as the United Arab Emirates (2.3%) and far less than Singapore (4.5%). These are not manufacturing superpowers, but they are major hubs for trans-shipment. India is planning a big hub at Galathea Bay in the Nicobar Islands, located near one of the world's most important shipping routes. The location is "God's gift to India", says Vinayak Chatterjee of the Infravision Foundation, a think-tank.

Last year the government outlined its ambitions for the maritime sector by 2047, by which time Mr Modi has promised to make India a "developed country". These include quadrupling overall port capacity to 10bn tonnes, becoming a leading ship-builder and creating two new trans-shipment hubs. Experts question whether India really needs such hubs. But it is clear that India's trade infrastructure could improve. Its ports are not very prominent on global shipping routes. It also needs deeper ports to cater to bigger vessels.

JNPA, which will soon run out of space to expand, is planning a new port at Vadnavan, 130km north of Mumbai. It will be built on a man-made island off the coast and will be deep enough to accommodate some of the biggest ships in the world. But building a port is the easy part. Connectivity to the interior is still patchy. Coastal shipping is minimal. Customs processes have reduced the amount of time imports sit at docks but much less so for exports.

The success of these policies matters for reasons greater than just boosting trade. India's politicians are often criticised for focusing on visible outcomes. But fixing infrastructure most voters do not see and simplifying rules most do not consider show that the state is capable of enacting deeper reform. If India can do it with ports, that is a hopeful sign that it can do it with other parts of the economy, too. ■



China



China and Europe

Stirring ghosts

BELGRADE

On his first visit to Europe in five years, Xi Jinping reminds the West of an old grievance

THE POPULATION of Serbia is less than one-third of Beijing's. China's trade with the Balkan country is less than one-fortieth of that with Germany. Yet for China's ruler, Xi Jinping, Serbia is important. It is a rare close friend on a continent where wariness of China has become the norm. And the country's capital, Belgrade, witnessed a seminal moment in the evolution of Chinese nationalism. Twenty-five years ago American bombs hit the Chinese embassy there, killing three people. On his first visit to Europe since 2019 Mr Xi held talks with Emmanuel Macron, the president of France, hoping to persuade him and his allies that China and its products are good for them. Then, in Serbia, Mr Xi used the anniversary of the bombing to make a thinly veiled point: that the Western-led order is bad and must be changed.

The world has changed dramatically since Mr Xi's previous visit to Europe. A pandemic has swept it, keeping Mr Xi from venturing abroad for nearly three years.

Russia—China's "no limits" partner—has mounted an invasion of Ukraine, plunging Europe into its biggest security crisis since the cold war. Under President Joe Biden, America has ramped up a tech war with China aimed at curtailing its access to cutting-edge kit. The European Union now talks of "de-risking" its relationship with China. Amid accusations that China is dumping products on Western markets, calls for retaliation have been growing.

Mr Xi hopes Mr Macron's vision of "strategic autonomy" for Europe might dovetail with China's push for a "multipolar" world that is less in thrall to America. But, though feted by Mr Macron, Mr Xi also got an earful from him, not least over trade and Ukraine. And he, in turn, pushed

back. "We oppose using the Ukraine crisis to cast blame, smear a third country and incite a new cold war," he said.

In Serbia Mr Xi amplified his misgivings about the West. By recalling the embassy's bombing, he apparently hoped to make two points: that American alliances are not merely defensive but threatening, and that China is a far stronger power today. Vuk Vuksanovic of the Belgrade Centre for Security Policy, a think-tank, reckons Mr Xi was thinking: "This is one episode where we had to turn the other cheek, where we were humiliated...but now we have risen, reborn like a phoenix."

Never mind that America has apologised for the bombing and paid compensation. The anniversary still resonates among Chinese, many of whom reject America's insistence that its precision-guided missiles hit the wrong target as a result of an error caused by outdated maps and faulty databases. The attack was part of a NATO air campaign against Yugoslavia aimed at stopping atrocities in Kosovo. America says its intended target had been nearby offices involved in military procurement.

When he was last in Serbia, in 2016, Mr Xi visited the site of the bombing to pay homage to the three Chinese journalists who were killed there. He also laid a foundation stone for a new Chinese cultural centre (the embassy having moved elsewhere). Today the eight-storey edifice, with

→ ALSO IN THIS SECTION

33 Deepfake Russian women

34 Chaguan: To get rich is perilous

▶ a statue of Confucius in front, makes a bold architectural statement of China's soft power in a dreary-looking district (and, Chinese nationalists would be delighted to hear, towers over the neighbouring embassy of their nemesis, Japan).

Mr Xi skipped the site this time, though in a piece penned for Serbia's *Politika* newspaper, he said China would "never allow such tragic history to repeat itself". For Chinese tourists, the building and a monument next to it have become a magnet. An agricultural scientist in his 40s from Harbin, in China's north-east, recalls joining the anti-NATO demonstrations that erupted in 1999—the most extensive street protests in China since the Tiananmen Square unrest a decade earlier. Unlike that pro-democracy upheaval, the uproar over NATO had the government's blessing. The protests, says the visitor, saw young Chinese who had once worshipped the West, "thinking the foreign moon is rounder", turn against it. Demonstrators splattered American and British embassy buildings with paint and smashed their windows.

At that time Mr Xi was the deputy Communist Party chief of Fujian province. Since 2012, as the country's leader, he has encouraged the kind of nationalism that took hold in China after the bombing. On this year's anniversary China's social media brimmed with expressions of outrage. "That year, I was still an ignorant youth," wrote one commenter. "It was the first time I learned about America's bullying, the first time I cried in pain for strangers."

China's commemorations of the event help reinforce a view promoted by state media that NATO is an aggressor. Chinese officials echo Russian arguments that NATO's expansion has threatened Russia's security. Vladimir Milic, the editor of *Savremena Kina*, a Serbian website on Chinese affairs, notes China's anxiety about American efforts to bolster its alliances in Asia. He says that by highlighting the embassy bombing, Mr Xi's message was: "We need to be careful, see what they did."

Serbia shares Chinese sympathy for Vladimir Putin. The country is not a member of NATO, nor of the EU, though it is a half-hearted applicant. Its autocratic leader, Aleksandar Vucic (pictured on previous page), provides Mr Xi with the kind of fawning praise that he is used to at home. In an interview in February with Chinese state television, he recalled a meeting with Mr Xi in 2016. "I realised that I was talking to a guy that was much, much, much smarter and much better prepared," Mr Vucic said. Mr Vucic is also full-throated in his support for China's position on Taiwan. "Taiwan is China. And it's up to you, what, when, how you're gonna do it. Full stop," he told the interviewer, implying that Serbia would not oppose a Chinese attack on the island. It appreciates that China, unlike

Propaganda and artificial intelligence

From Russia with love?

BEIJING

Why young Russian women appear so eager to marry Chinese men

IN THE EARLY stages of China's history as a communist state, the Soviet Union was often referred to as *Sulian dage*, or Soviet big brother. China relied on it for weapons, funding and political support. In many ways the roles have now reversed. Russia's president, Vladimir Putin, is expected to meet his Chinese counterpart, Xi Jinping, this month in Beijing. China has been accused of propping up Mr Putin's war machine.

Chinese nationalists are pleased with the new power dynamic. In recent months short videos have been popping up online which play to their feelings of superiority and continue a tradition of using foreigners to aggrandise China. They feature pretty young Russian women expressing their admiration for China and their desire to marry Chinese men.

The women—with names like Natasha and Sofia—speak fluent Mandarin. They complain that Russian men are drunk and lazy, while praising Chinese society and technology. For a Chinese husband, the (mostly blonde) beauties say they would be delighted to cook, wash clothes and bear children.

To Chinese men, it may sound too good to be true—and it is. The videos are deepfakes, produced with increasingly cheap artificial-intelligence (AI) tools. They are relatively easy to make using short samples of real footage. With dubbing and video-editing software producers can transform any woman into a Chinese bachelor's dream.

Olga Loiek, a Ukrainian woman studying in America, was shocked to see her image speaking Chinese with the Kremlin in the background. She found dozens of accounts using her face. "I was



AI love China!

disgusted and felt like my personal autonomy was violated," she says.

The videos, posted on social media, have drawn hundreds of thousands of views. Some are used to hawk products or simply to glorify China. They have recently come under official scrutiny. Last month China's main cyberspace regulator announced regulations which, among other things, require the explicit labelling of AI-generated fakes.

In recent weeks the videos have become harder to find. But nationalists' pride over China's new-found status as Russia's big brother runs deep. And the fake Russian women were attracting their attention. Don't be surprised if they make a comeback.

America and most of its allies, does not recognise Kosovo as an independent state.

As *The Economist* went to press, Mr Xi was wrapping up his European tour in neighbouring Hungary—a rarity as a country that is a member of the EU and NATO, as well as a staunch supporter of China. Like Serbia it is a proud participant in China's Belt and Road Initiative, a global infrastructure-building project; China is helping to build a high-speed rail link between Belgrade and Hungary's capital, Budapest. The two countries are dotted with Chinese investments totalling billions of dollars.

China delights in the political payback: Hungary digs in its heels when the EU tries to censure China on human rights.

It is unlikely that Mr Xi will win more converts to his cause in Europe as a result of his trip. But his show of support for the friends he has will be noted elsewhere in the world. China's struggle with the West also involves a contest for support in the "global south". Many of the world's poorer countries share Serbia's and Hungary's eagerness for Chinese railways and factories. Mr Xi may be losing Europe, but he has plenty of other places to win. ■

CHAGUAN

To get rich is perilous

In today's China, business sectors can be praised one day and banned the next



SINCE CHINA re-embraced capitalism decades ago, rich rewards have flowed to entrepreneurs who understand what the Communist Party wants. Today grasping what the party dislikes may be a more precious skill. This is an era when leaders' priorities can change overnight. When the winds turn, entrepreneurs need to curb their ambitions without complaint.

Ningxia, a poor western region, is a good place to observe this trend. A decade ago Ningxia's government announced plans to "go global" and "seize the commanding heights" of domestic and foreign markets for meat and dairy products that are halal, or in line with Islamic food laws. As dreams go, this was not especially fantastical. Though much of Ningxia is arid grasslands, the region is home to big dairy companies and sheep and cattle producers. Just over a third of its 7.3m-strong population are Hui Muslims, Chinese-speaking descendants of long-ago migrants from Arabia, Persia and Central Asia. Many local Hui shun pork and alcohol and eat products approved by the region's religious-affairs bureau as *qingzhen*. The term is Chinese for "pure and true" and can mean both halal and Islamic (mosques are known as *qingzhen* temples).

Ningxia officials built a halal industrial park with room for hundreds of companies in Wuzhong, a majority-Muslim city of 1.4m people. Showing keen political instincts, officials tied these plans to the Belt and Road Initiative (BRI), Xi Jinping's globe-spanning infrastructure scheme. The BRI was designed in part to link backwaters such as Ningxia to new markets in Eurasia. In 2015 Ningxia's government urged firms making halal food and Islamic clothing to "firmly grasp the strategic opportunities" of the BRI by deepening ties with Muslim countries in the Middle East as well as Central and South-East Asia. That same year local officials set a target for the output of Wuzhong's halal industrial park to hit a whopping 30bn yuan by 2020 (\$4.2bn at current exchange rates).

Propaganda outlets held up Hui entrepreneurs as model workers. In 2016 the *Guangming Ribao*, a newspaper under the control of the party's central committee, profiled the Yang Haji Halal Agriculture and Animal Husbandry Industrial Development Company, a producer of animal feed in the rural county of Tongxin. Its founder, Yang Jian, whose honorific "Haji" denotes a Muslim who

has made a pilgrimage to Mecca, described how he guaranteed halal traceability for every sack of feed leaving his factory. The market potential was "huge", the writers reported, lamenting that so few Chinese halal firms had international brands.

Looking back, 2016 marked a high point of official enthusiasm for halal exports. That same year saw central authorities in Beijing reject calls to enshrine Islamic food rules in China's legal code. Enacting national regulations was a long-standing request from halal-food companies, who complained that many foreign Muslim countries mistrusted products from atheist, pork-eating China.

Seemingly shutting down such debate, Mr Xi called on officials to maintain a strict separation between religion and the secular state. He also called for Islam and other foreign religions to be "sinicised". State-approved scholars warned against *qingzhen fanhua* (pan-halal tendencies). Over the next few years Ningxia and other provinces with large Hui communities abolished many halal regulations and made Muslim restaurants remove Arabic signs. Chinese-speaking Hui regions were mostly spared the ferocious security campaigns imposed on Turkic-speaking Uyghur Muslims in Xinjiang. Still, Ningxia saw protests when mosques were stripped of domes and minarets and given Chinese-style roofs.

Chaguan visited Ningxia recently. Arriving unannounced at the former Yang Haji halal food plant in Tongxin, he found the company merged with a Xinjiang firm, Tycoon Group, and renamed Ronghua, or Glory to China. Large red characters on a factory wall read: "Listen to the Party, Be Grateful to the Party, Follow the Party". Waiting in Mr Yang's office for him to return from a meeting, your columnist was joined by a clutch of officials led by Liu Yan, head of the county's propaganda department. "Were you at the mosque?" blurted out Ms Liu, for Tongxin county saw large demonstrations over mosque alterations a while ago.

When Mr Yang arrived he said that "great changes" had reshaped his business, which now focuses on domestic clients. Under Ms Liu's steady gaze, he added that market forces guided this shift, as his expectations for exports had been too high. Ms Liu broke in. Ningxia is "actually very small", she said. With a few neighbouring areas, "we can consume all our production locally".

Bonding over deserts, not mosques

The global market for halal food is estimated to have reached \$2.5trn last year. Unsurprisingly, other Ningxia entrepreneurs still dream of exports. Arab countries are an important market and Arabic people are "friends", said the owner of a halal spice and sauce business encountered at a government-run food festival in Wuzhong. For a couple of years fears of pan-halal tendencies led to stricter controls, he recalled, as one of several plain-clothes agents following Chaguan listened intently. Recently controls have eased a bit, to boost the economy and help local Hui, the business-owner suggested. He nodded at staff manning his stall, noting that they may wear white Muslim skullcaps once more.

Sadly for that entrepreneur, Ningxia has moved on. Wuzhong's industrial park has lost its halal label, scaled back its ambitions and now focuses on high tech. Official speeches at the food festival praised delicacies from China's "western regions" but made no mention of halal or Islamic traditions. Ningxia's government encourages sales of irrigation systems and drought-resistant crops to the Middle East. For a Hui region, it is safe to bond with Arab customers over arid agriculture, but not over shared Muslim faith. In today's China growth is good, but security comes first. ■

Middle East & Africa



The Gaza war

Running in place

JERUSALEM AND DUBAI

After a dramatic week in Gaza, where does the war stand?

FOR MONTHS diplomats in the Middle East have obsessed over two issues. One is the stop-start effort to broker a ceasefire between Israel and Hamas, which would see the group release some of its hostages. The other is the long-threatened Israeli offensive in Rafah, the southernmost city in Gaza, now home to 1.5m people displaced from elsewhere in the enclave. It was a stark choice: either a deal to pause the war or an offensive to widen it.

Then both seemed to happen at once. On May 6th the Israeli army dropped leaflets on Rafah urging about 100,000 civilians to evacuate the city's south-east. Panicked residents gathered belongings and fled. Later that evening, though, Hamas unexpectedly announced that it had agreed to a proposed ceasefire. Gazans thought their seven-month ordeal was at an end, but that hope was premature. Hours later, amid heavy air strikes, Israeli

tanks rumbled into Rafah's periphery.

It was a dramatic day—yet less dramatic than it seemed. Both Israel and Hamas have now agreed to a ceasefire plan, but not to the same one. It will probably take at least a week or two to reach a compromise—and that may not happen at all. If the war has not stopped, however, neither has the Rafah offensive truly begun. In a week where everything seemed to change, perhaps nothing has, at least not yet.

The Israeli tanks that crossed into southern Gaza did not enter Rafah proper. Instead they seized part of the Philadelphia corridor, a strip of land next to Egypt, and the border crossing (also called Rafah) be-

tween the two territories (see map on next page). Army officials say they have not yet been ordered to enter the city itself, nor to advance farther north along the corridor.

Since Hamas took over Gaza in 2007, the border with Egypt and the smuggling tunnels beneath it have been a lifeline. Weapons would enter, and militants would exit to seek medical treatment or safety. Abdel-Fattah al-Sisi, the Egyptian president, has periodically made a show of destroying the tunnels. But smuggling is lucrative: soldiers on the Egyptian side are happy to take a cut. Israel has a strategic rationale to seize the border. Indeed, some army officers believe they should have done so during the early weeks of the war.

But the border is not only vital for Hamas. The Rafah crossing is the only way ordinary Gazans can escape the strip. It was the only conduit for humanitarian aid in the first two months of the war. Though it has been eclipsed in recent months by Kerem Shalom, a commercial crossing between Israel and Gaza, it remains important: 23% of the 5,671 lorries that entered southern Gaza last month came via Rafah.

When the order to seize the corridor came down, late on May 6th, Israeli generals were surprised. They had not expected to enter southern Gaza for at least another week. The hasty incursion meant they had

→ ALSO IN THIS SECTION

36 Lousy Arab armies

37 America's struggle in Africa

► no plans for how to keep the Rafah crossing operational. The army considered bringing a unit now stationed at crossings in the Israeli-occupied West Bank or an American private-security firm to oversee the border post. This is an urgent matter: the Kerem Shalom crossing was temporarily closed earlier this month after Hamas twice fired rockets at it, although the Israeli army said it had reopened on May 8th.

The rushed military manoeuvre was a political choice. When the war cabinet convened on May 6th, it made two decisions: to go ahead with the incursion into southern Gaza, and to send a low-level team of negotiators to Cairo for talks about Hamas's ceasefire proposal. For Benjamin Netanyahu, the prime minister, the first order was meant to balance the second. His far-right allies have threatened to leave the coalition if he makes a deal with Hamas. Fear of that drives his decisions.

Closer than you'd think

Negotiators have not released the exact ceasefire proposal that Israel agreed to last month. But they have briefed journalists on its main points, and Arab media outlets sympathetic to Hamas have published what they say is the full text of the group's counter-proposal. The two are broadly similar. Both envisage a three-stage ceasefire, starting with a six-week period in which Hamas would release 33 Israeli hostages—women, children, the old and the sick—in exchange for hundreds of Palestinian prisoners in Israeli jails.

In the second stage, also six weeks long, the two sides would work towards a "sustainable calm" in Gaza. That term of art is meant to gloss over a major sticking-point: Hamas wants the deal to lead to a permanent ceasefire; Israel will accept only a temporary one. The vague phrasing was chosen to satisfy both sides. If they do manage to reach that elusive calm, Hamas would release all of its remaining captives. The third phase would see an exchange of bodies and an end to the war.

But there are a few notable differences between the texts. The most significant are related to the hostage release in the agreement's first stage. The earlier proposal required Hamas to free three living hostages every three days, up to a total of 33. Hamas countered with a more drawn-out schedule: just three per week until the sixth and final week, when the group would free the rest of the agreed-upon 33 captives.

Hamas also dropped the commitment to free living hostages. Instead, it might hand over an unspecified number of bodies. Israeli officials believe that over one-quarter of the 132 hostages still in Gaza are already dead. This is only an estimate. For months, Hamas has refused to provide details on their well-being. These are not trivial differences—but they could probably

be resolved through further talks.

The question is whether Mr Netanyahu wants to resolve them. Most Israelis support an agreement. A survey conducted earlier this month by the Israel Democracy Institute, a think-tank, found that 62% of them (and 56% of Jewish Israelis) think a hostage deal should take priority over a Rafah offensive. Among right-wing Jews, however, the numbers are flipped: 55% think Rafah is more important. And they are Mr Netanyahu's core constituency.

The prime minister cannot take the deal and keep his coalition. He is not only under pressure from small far-right parties. Senior members of his own Likud party are also pushing him to reject a truce and go into Rafah. If he refuses, he could lose their support. Yair Lapid, the opposition leader, has said he would back Mr Netanyahu if the prime minister needs help with a hostage deal—but his backing would be short-lived. Early elections would follow.

If Hamas refuses to budge on its ceasefire proposal, Mr Netanyahu could claim he negotiated in good faith but had to reject a flawed deal. Should that happen, though, he would face another dilemma: whether to order the Rafah offensive.

If he did, Joe Biden would be furious. Until now, the American president's mounting anger with Mr Netanyahu has not gone much beyond strong words. But on May 8th he said he would not supply Israel with the weapons that would be used in an attack on Rafah. It was Mr Biden's strongest action to date against Israel. If it becomes broader policy, it would hobble the Israeli army, which cannot sustain a war without American resupply.

Over his long career, Mr Netanyahu has honed indecision into an art form. He has spent the past few months half-heartedly agreeing to ceasefire talks and making empty promises about a Rafah offensive—pursuing both, but ensuring he achieved neither. Now, though, both America and his right-wing allies are losing patience. He may not be able to dither much longer. ■



Arab armed forces

Land of the lousy

Why are Arab armed forces so ineffective?

WHEN ARAB air-defence crews helped fend off Iran's missile attack on Israel in April, they drew much praise. And yet Arab states are not usually lauded for their martial prowess; many have lousy military reputations. They have been repeatedly humiliated in wars with Israel. They proved ineffective during the 1991 Gulf war; Egypt deployed two armoured divisions but America quickly sidelined them when they struggled to overcome even limited Iraqi resistance. Other Gulf countries, such as Saudi Arabia, provided only a handful of troops. More recently, despite considerable American military support, the Saudi-led intervention in Yemen descended into a quagmire.

The problem is not a lack of money or hardware. Combined military spending across the six Gulf Co-operation Council (GCC) countries along with Egypt and Jordan reaches just over \$120bn a year (NATO's 30 European members spent \$380bn in 2023). Together they can marshal 944,000 troops (see map on next page), 4,800 tanks and 1,000 fighter aircraft. Egypt and Jordan are among the biggest recipients of American military aid, getting some \$1.7bn a year between them.

Much of that cash is squandered. Arab armed forces often splurge on vanity equipment like fighter jets that are ill suited to the asymmetric threats they face, argues Paul Collins, a former British defence attaché in Cairo. Flashy purchases are generally used to gain influence with Western governments, suggests Andreas Krieg of King's College London. Qatar's purchases of F-15s, Rafales and Typhoons have bought favour in Washington, Paris and London respectively. The business of buying, arming and maintaining combat jets is a cash-guzzler. Over the past ten years in Saudi Arabia, 54% of arms imports by value were lavished on aircraft. An obsession with air power generally comes at the expense of other service branches, such as the army and navy.

Indeed, for states whose prosperity depends on access to commercial shipping, many pay remarkably little attention to their navies. Fleets are small and usually focused on coastal defence. They also lack the early-warning sensors and interceptors that are useful for advanced seaborne air defence. They have done little to fend off the Houthi attacks in the Red Sea. For decades, many Arab states saw few reasons to

invest in navies, given American and British maritime protection, notes David Roberts, also of King's College London. Even those that have begun to invest in them face serious manpower shortages. Qatar's navy has ordered seven new ships from Italy. It will need 660 additional sailors to operate them, equivalent to a quarter of its current tally on deck.

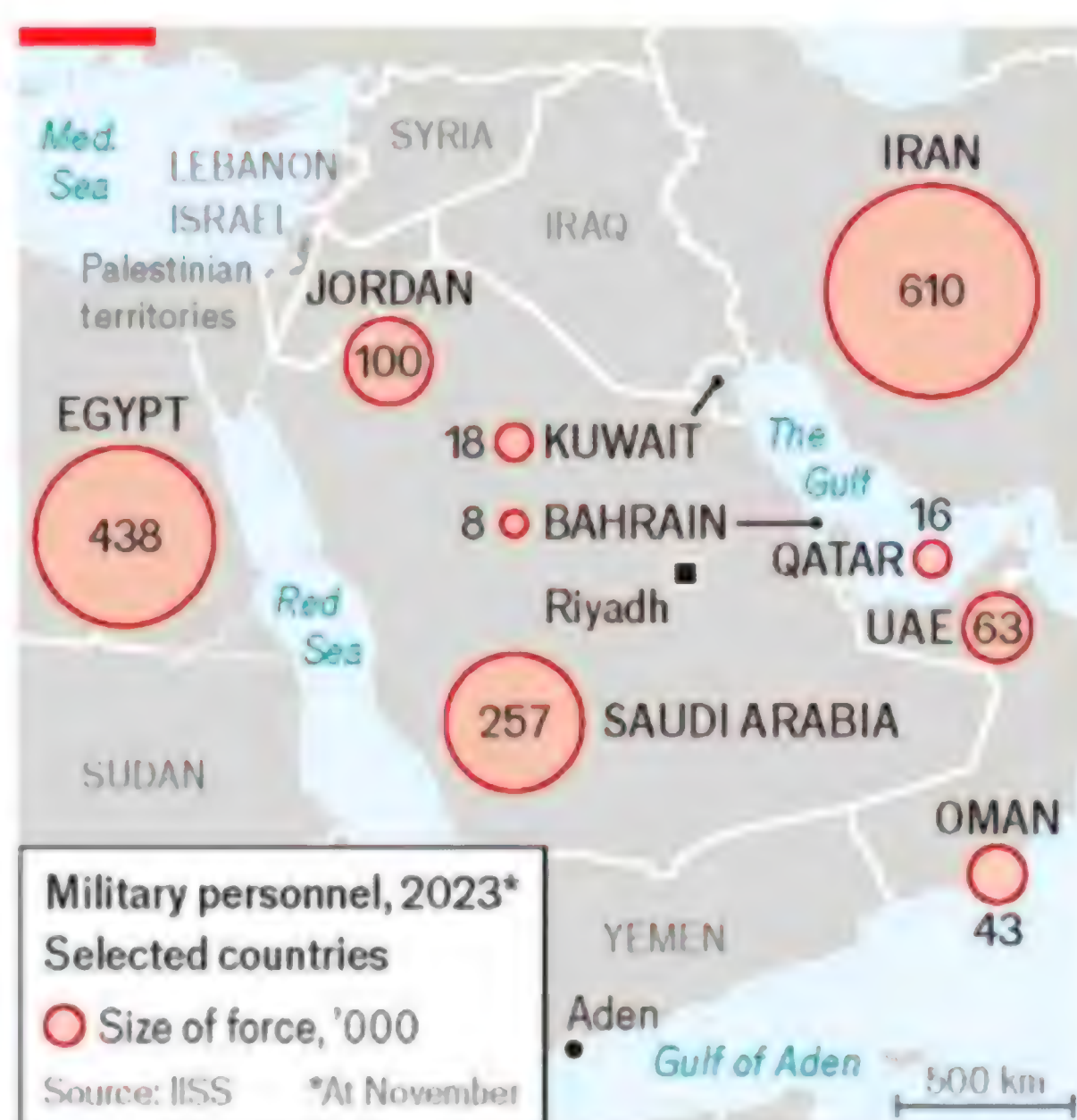
More to the point, authoritarian Arab rulers are often wary lest their armies turn against them. Military commanders are loth to provide rank-and-file soldiers with the independence needed for combined-arms operations, as is common in the West. Training exercises are often highly scripted and bear little resemblance to the reality of combat, notes Mr Krieg. Arab armies are often separate from praetorian guards. Saudi Arabia's 130,000-strong National Guard is the ruling family's personal protection force. In Egypt, the army runs a sprawling commercial empire that dabbles in everything from holiday resorts to construction firms.

Some hope that Arab armies could serve as peacekeepers in Gaza, but experts doubt that their forces have the operational wherewithal to handle such a tough mission. More often than not, they struggle even to co-operate with each other. "They are all very suspicious, they still don't trust one another," argues Kenneth Pollack of the American Enterprise Institute, a think-tank, and the author of a book on Arab military underperformance. Proposals in 2014 and 2018 to establish a joint GCC military structure rapidly fizzled out as smaller states fretted about ceding control to their bigger neighbours.

For many Arab leaders, securing America's commitment to the region is a higher priority than creating a multilateral bloc of their own. Few envisage fighting a war with another state without American backing. The Gulf countries still rely on America for intelligence, surveillance and reconnaissance, and for its command-and-control centres and refuelling platforms in the region. The Saudis are doggedly seeking a defence pact with America.

Braves of the desert

There are pockets of martial excellence. The UAE and Jordan have good professional armies, especially their special forces and pilots. In 2015 Emirati special forces carried out a complex amphibious assault on the Yemeni port city of Aden that impressed Western observers. Jordan has been conducting regular air drops of aid over Gaza, a difficult mission over the densely populated strip. Smaller, well-trained elite forces have nurtured an inspiring *esprit de corps*. But specialist expertise is often imported: the UAE's presidential guard and special forces have foreign advisers, most of them former Western offi-



cers, and are commanded by an expatriate Australian general.

Moreover, a measure of effective co-operation has begun. The thwarting of Iran's attack on Israel, though marshalled by America, would not have been possible without quite a degree of Arab co-ordination, says Mr Collins. Since 2019, when a drone attack, probably by Iran, halted

nearly half of Saudi oil production, Gulf and other Arab states have started integrating their air-defence systems. Some experts suggest that many Gulf air-defence units are more adept than their European counterparts. In 2022 a handful of Arab countries secretly joined Israel in a loose, American-led regional air-defence alliance that stitched disparate radar-detection systems together.

Some observers are still cautious. "There is nothing in the technical realm that is preventing integration of things like air defence," notes Mr Pollack. "It's all about the politics." Big political changes at home could set the stage for military reform. Conscious of the looming energy transition, Gulf monarchies want to reshape their economies and societies. They are shifting money towards advanced military technology, including artificial-intelligence research centres, instead of just costly conventional platforms. Gulf governments hope that spending on whizzy military kit will also boost the civilian economy. But it may not do much to burnish their martial reputations. ■

America in Africa

An uphill struggle

NAIROBI AND WASHINGTON, DC

Joe Biden's administration is struggling for influence in a continent where Russia and China are gaining ground

JUDGING BY EVENTS in the Sahel over the past few years, America's standing in Africa has taken a severe knock. It has patently failed to stop the spread of coups across a belt stretching from Guinea in the west to Sudan in east, all now run by military men. American efforts to nudge Sudan from military dictatorship to democracy have ended in a bloody civil war. Last year Niger's generals told America to close down its base, from which it provided intelligence in the war against jihadists linked to Islamic State and al-Qaeda.

After the coup there an American delegation led by Molly Phee, the state department's hapless Africa chief, was given short shrift by the generals. "It was a humiliation," says an American expert on the Sahel. Worse was to come early this month, when the commander of US Africa Command said America would have to withdraw most of its smaller force from Chad "as part of an ongoing review of our security co-operation".

Meanwhile Mali, Burkina Faso and Niger have welcomed Russia as their ally of choice. Russian troops are also entrenched in the Central African Republic. South Sudan, where America mediated indepen-

dence in 2011, has fallen into "the lost bucket", in the words of a doleful adviser to President Joe Biden. A poll last year by Gallup found that African approval of America's leadership has waned while that of China's has risen (see chart on next page).

As America's global rivalry with Russia and China intensifies, its ability to project influence in regions such as Africa is coming into sharper focus. At the same time America faces competing demands to divert its resources—military, political, diplomatic and financial—to its allies' flashpoints in eastern Europe and East Asia.

Its fading power in parts of Africa stems from three main factors: increased competition, including from middle powers such as Turkey and the United Arab Emirates; a growing tension between its avowed intent to promote an idealistic democracy-promoting foreign policy versus the harsher demands of realpolitik; and the distraction of crises in other continents. "Africa has once again slipped a long way down the totem pole," laments an executive at the pro-democracy Open Society Foundations. As many civilians may be perishing in Sudan as in Gaza and or Ukraine, yet that catastrophe gets far less

► American (or global) attention.

The first two of those factors have been plainest in the coup belt. American diplomats have been torn between maintaining relations with the new juntas and complying with America's legal restrictions on providing military aid to governments that have seized power unconstitutionally and that violate human rights. This has created an opening for Russia, which has no such qualms and is keen to provide forces to "coup-proof" the new military regimes.

Yet many Africans have been quick to accuse America of hypocrisy and double standards. Disappointed rights activists point to a renewed readiness by the administration to engage with some of the worst regimes in Africa, such as the one in Equatorial Guinea, where China is said to want to build a naval base. America also seemed happy to wink at flaws in the latest election in Congo, which has the world's largest reserves of cobalt.

Jeffrey Smith, founder of Vanguard Africa, a pro-democracy outfit in Washington, bemoans what he considers Mr Biden's dismal failure to speak out robustly against human-rights abuses in countries such as Ethiopia, Rwanda, Swaziland and Uganda. America's overriding policy nowadays, he says, is "not to rock the boat".

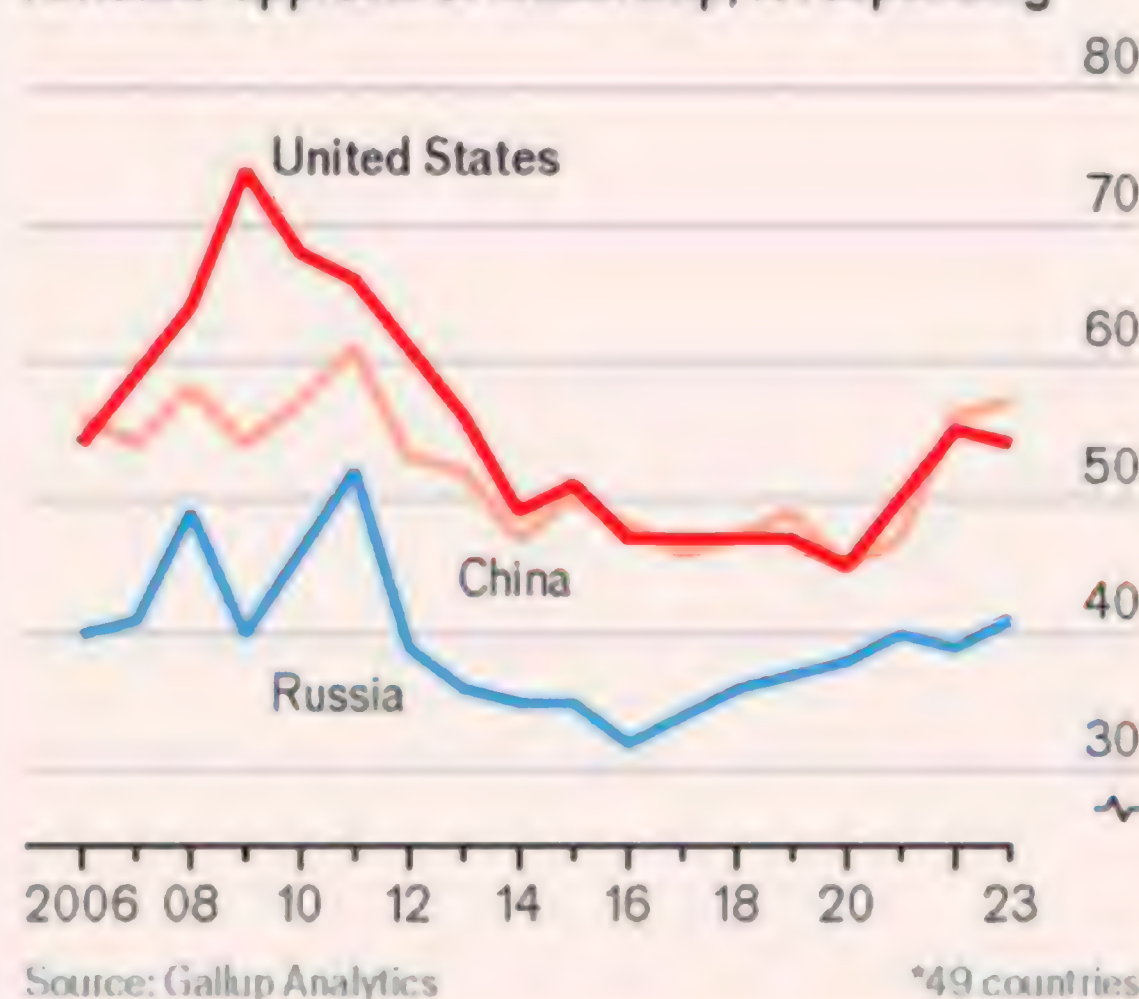
At the UN America has been faring little better. Its ambassador, Linda Thomas-Greenfield, an experienced and respected Africanist who previously had Ms Phee's job, has made the best of it, recently seeking to rekindle international interest in Sudan. Since Russia's invasion of Ukraine, America has expended much diplomatic energy trying to persuade the African bloc to vote against Russia—with only limited success; South Africa, among other leading countries, has refused to back Ukraine. Shortly after the invasion, 28 African countries condemned Russia in the UN General Assembly, but another 25 abstained or stayed away.

America's support for Israel's campaign against Gaza since last October has tilted African opinion heavily against America. Samantha Power, a human-rights champion who runs USAID, America's foreign-assistance agency, has been pilloried by rights campaigners for not speaking out against Israel over Gaza. "I've never experienced such low perceptions of our foreign policy by Africans," says Mr Smith.

This gloomy list of American setbacks should not, however, be exaggerated. "We've succeeded in reframing why Africa is so important," says Judd Devermont, who was Mr Biden's chief Africa adviser in the National Security Council until February. "As the international system has been reordered and the global governance architecture has changed, Africa has to be much more a part of it." The continent's complexity, he says, is being better understood

Uncle Sam slips

Africans' approval of leadership, % responding*



by Americans. It is not just about keeping China and Russia at bay. Besides, friends of America note that the Sahelian countries are among the poorest and most desolate in Africa, and have long been misgoverned. It is most unlikely that Russia, which still has a poor reputation across the continent, will succeed in bringing them lasting peace or prosperity.

We're helping more than you think

At a grand summit in Washington in December 2022 leading lights from 49 African countries (only five were shunned as too toxic to be invited) were assured by Mr Biden that, unlike his predecessor, he was "all in" for Africa. He said he was determined to see it seated permanently at the top table in a range of global forums. He talked of pouring \$55bn into an array of new African projects. He promised to visit the continent by the end of 2023.

Some of this materialised. The African Union was inducted at America's initiative into gatherings of the G20. America declared its support for an African country (it

warily refuses to say which) to have a permanent seat in the UN Security Council. With America's backing, Africa has won better representation at the IMF and international banks.

But much of that \$55bn turned out to be rebranded projects already planned or in the pipeline, spread over several years. No African country is permanently in the Security Council. Mr Biden failed to keep his promise to visit Africa last year; his Africa advisers reel off what they insist is an unprecedentedly long list of cabinet members, led by the secretary of state and the vice-president, who have swung through it since the summit.

On the credit side, America has boosted programmes such as Power Africa (said to have helped more than 33m Africans last year alone to get electricity) and the Digital Transformation for Africa. Mr Biden's Africa team gushes about a plan under way to revamp a railway from Zambia and Congo to the Angolan port of Lobito. Denying that American policy is driven by super-power rivalry, Mr Devermont says China's push into Africa has anyway peaked: new lending has dropped sharply since 2016.

Though Mr Biden's Africa team still looks to Nigeria and South Africa as the continent's undisputed giants, in the short run the thrust of America's diplomacy has shifted away from them. While Nigeria is considered vibrant but messy, American relations with South Africa have worsened, in view of the ruling African National Congress's dismal record of misgovernment and its pro-Russian stand over Ukraine.

So it is notable that Kenya's William Ruto later this month will become Africa's first president to be granted a state visit to Washington since 2008, though in 2010 he was indicted by the International Criminal Court in The Hague for his alleged role in post-election violence (the charges were later dropped). "From sinner to saint," chuckles a rueful Washington pundit.

Kenya has won American plaudits for its role as east Africa's diplomatic and business hub, and as a bridgehead for humanitarian supplies to the troubled parts of the wider region, including Sudan, South Sudan, Ethiopia, Somalia and eastern Congo. Mr Ruto hosts American special forces near the border with jihadist-threatened Somalia and has pleased America by offering to send Kenyan police under UN helmets to Haiti.

At least it is some comfort to American Africanists that policy towards the continent is still a rare case where congressional oversight is broadly bipartisan. But if Donald Trump were to regain the presidency, Africa would surely fall even further down the list of priorities. Mr Biden's administration can at least claim to have laid out an ambitious agenda for Africa, even if many of its aims have yet to be fulfilled. ■



Come on in, Vladimir

SPECIAL REPORT

Deglobalisation of finance

→ MAY 11TH 2024

- 3 The fracturing of global finance
- 4 A brief history of fragmentation
- 7 Declining capital flows
- 8 National payment systems
- 10 The fight to dethrone the dollar
- 11 Sino-American conflict



Reason with rigour

Ask smart questions and make better business decisions
with our new critical-thinking course

In the AI age, it is essential to capitalise on human advantage in business. Featuring journalists from *The Economist* and leading critical-thinking experts, our new course will equip you with the tools to challenge biases, practise “slow thinking” and reframe complex problems.

Contributors include:



Daniel Kahneman
(1934-2024)
Nobel laureate in
economics; filmed 2023



Kate Raworth
Author and economist



Tom Standage
The Economist



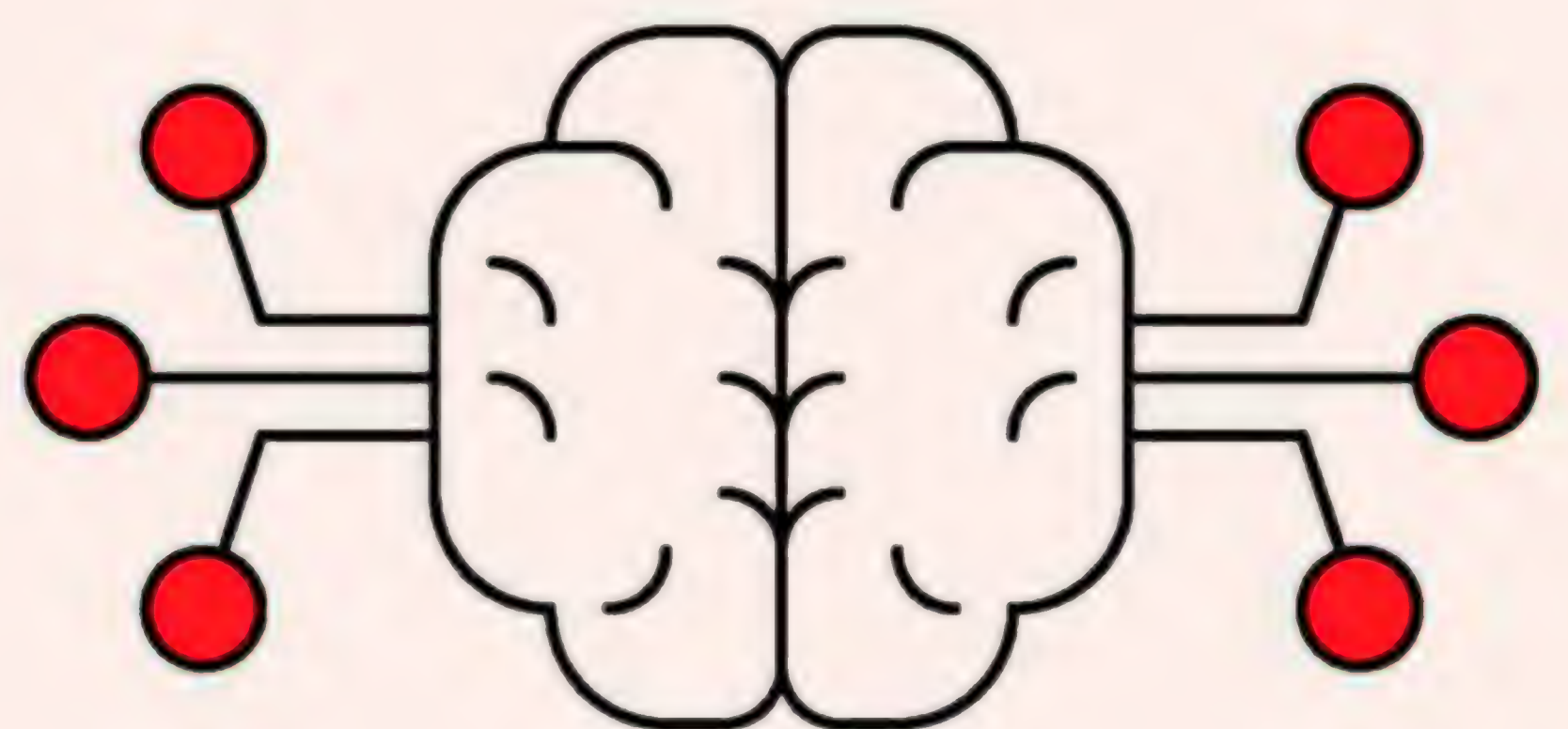
Timandra Harkness
Author and broadcaster



Tom Chatfield
Author and broadcaster



Kenneth Cukier
The Economist



To find out more, scan here or visit:
economist.com/critical-thinking-course

**ECONOMIST
EDUCATION**



The fracturing of global finance

A financial system that is more international than ever is at risk of breaking apart, argues Joshua Roberts in a special report

TEN YEARS AGO your correspondent was fidgeting nervously in a meeting room at VTB Capital, the investment-banking arm of Russia's second-biggest bank, just across the road from the Bank of England. During the recruitment process for a graduate job, things had taken a worrying turn. A Russian missile had shot down MH17, a passenger flight from Amsterdam to Kuala Lumpur, while it was passing over Ukraine. Plenty of Russian firms were already under Western sanctions owing to the annexation of Crimea earlier that year. Now sanctions were being ramped up, and VTB Capital's parent bank was a prime target. Hence the fidgeting: how to ask the slightly alarming man across the table whether there would even be a VTB in a few months' time?

Indeed there would be. VTB's shop front in the City of London kept busy for years (and briefly employed your correspondent). Russia's invasion of Ukraine in 2022 finally prompted severe enough sanctions to shutter the London office, but the business it conducted goes on, now from Moscow. In a way that would

have been unthinkable in the 1990s or 2000s, when the financial order resembled a hub-and-spoke system dominated by America at the centre, VTB still pipes capital to sub-Saharan Africa, eastern Europe and Asia, avoiding Western nodes altogether. To a Muscovite banker, globalisation is not dead. It simply no longer involves America and its allies.

VTB's case suggests an epochal shift in the global financial system. This special report will argue that an array of forces—some long-gestating, others newer—have combined to reduce the system's dependence on Western capital, institutions and payment networks, and on America in particular.

In view of the dramatic changes to the world's economic geography over the past few decades, this was perhaps inevitable. Most obviously, China's rapid rise has caused its share of global economic output to balloon (see chart). But many other countries have grown alongside it. In the early 1990s, today's ten biggest emerging-market economies accounted for 12% of the world's output. They now contribute about a third.

Spreading the wealth

The consequences of this shift will be enormous. A monolithic system long dominated, for better and worse, by America, has diversified to the point that big chunks of it could conceivably break free and go their own way. The financial centres of Asian stalwarts like Singapore, Hong Kong and Tokyo, as well as upstarts Shanghai, Beijing and Dubai, are catching up with New York and London. Many countries' capital markets have grown up, too. Whereas hefty stockmarkets were once the preserve of advanced economies, with businesses elsewhere having to look abroad for equity capital, plenty of emerging markets now have thriving bourses of their own. And countries that once had ►►

► to raise government debt in American dollars can issue much of it in their own currencies.

There is much to celebrate about this. In the old hub-and-spoke era of global finance, America's monetary policy, flighty investors and general mismanagement of banks exported crises around the world (with some help from Europe). Compared with that, the present, more distributed financial system looks like a source of stability. Countries have become more resilient to the system's recurrent volatility and crashes. Just look at the absence of emerging-market implosions over the past two years, as the Fed has raised interest rates more rapidly than at any point since the 1980s. Poor countries are also beginning to build vital financial infrastructure of their own, as new national payment systems come online. Owing to the competitive threat these pose, incumbents are upgrading clunky digital architecture and racing to lower costs.

But danger looms as well. Rising geopolitical tensions, or full-blown wars, could tug the system apart altogether. A world in which countries, investors and businesses must pick a bloc and never venture outside it would be a poorer one, and more volatile—and perhaps more prone to conflict. Financial sanctions, protectionism and a geopolitical realignment of capital flows all bring that fractured world closer. Frustratingly for countries eager to escape from America's orbit, these forces have not eroded the dollar's hegemony over global finance which, relative to its nearest competitors, has only grown. The result is an uneasy dependence on America's financial plumbing even as other parts of the system fragment.

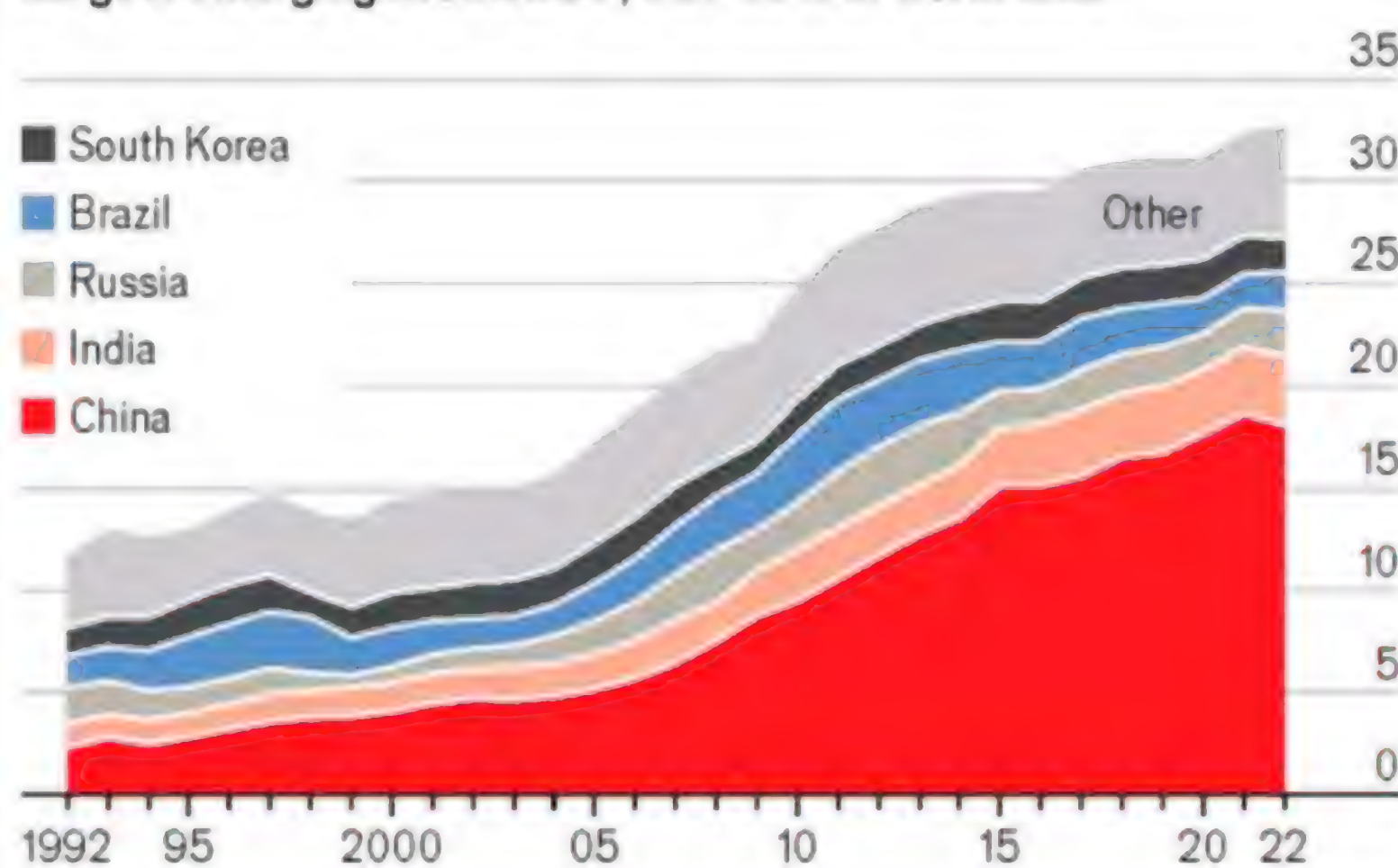
A grave new world

It is now the shape of the system itself that is unstable. Combine the growth of its non-Western poles with the shifting geopolitical distance between them, and it is all too easy to imagine that shape changing suddenly, with unpredictable consequences.

This matters because the global financial system is not just an abstract concept, but an entity that touches virtually every aspect of economic life. It governs how states, companies and individuals access capital, which determines their prospects for growth and prosperity. Its payment systems are vital to commerce. And it allows a vastly broader pool of people to share in the world's wealth creation than otherwise could. At its best, the system has kept rivals close. Begin, then, with the forces that are driving them apart. ■

The rise of the rest

Largest emerging economies*, GDP as % of world total



Source: World Bank

*Top ten in 2022

Realignment

A brief history of fragmentation

A series of crises reshaped the financial system. It took decades for the cracks in it to show

WRITING WISTFULLY in 1919, John Maynard Keynes reflected on how the first world war had brought the first great age of financial globalisation to a crashing end. A few years earlier a Londoner sipping tea in bed could, with just a phone call, “adventure his wealth in the natural resources and new enterprises of any quarter of the world”. If government bonds were more to his fancy than commodities or startups, he could “couple the security of his fortunes with the good faith of the townspeople of any substantial municipality in any continent that fancy or information might recommend”. This ability to share “without exertion or even trouble” in the world's wealth creation was part of “this economic Eldorado...this economic Utopia” in which Keynes had come of age—and which had been shattered by the war that broke out in 1914.

More than a century on, financial globalisation's second age has given the day trader tapping at her phone a menu of options that would put Keynes's imaginary gentleman to shame. Though war has returned to Europe, few financial channels have truly been closed. There has been no repeat of the wholesale shuttering of stock and bond markets that took place amid the first world war. The Londoner of 2024 can pick any of dozens of stockmarkets around the world in which to place his money without exertion.

Yet the global financial system is being refashioned once again. Recurrent crises, and the West's failure to contain their effects, have pushed middle-income countries to deepen their domestic capital markets, strengthen their institutions and insulate themselves from the volatility of international capital flows. American-led financial warfare has incentivised the creation of parallel systems whose chokepoints are beyond Uncle Sam's reach. Both of these trends have produced a system that is more distributed than the old hub-and-spoke model, one in which countries have options to turn to besides America. A third trend, America's growing economic conflict with China, may one day force some countries to choose sides. The looming threat is that the entire system fractures.

Start with the countries that have marched determinedly towards self-sufficiency, rather than rely on the vagaries of global capital. The most important such bloc comprises the victims of the Asian financial crisis of 1997-98. What began with a speculative attack on Thailand's baht, then pegged unsustainably to the American dollar, quickly became a financial and economic typhoon that swept through much of South-East Asia, South Korea and Hong Kong.

The crisis was so damaging in part because corporate and financial-sector debt had risen rapidly in the years beforehand. Much was borrowed from ►►

▶ overseas, at short-term maturities and in foreign currency. When Thailand's exchange-rate peg splintered in July 1997, it quickly became apparent just how risky this was. The central bank was forced to devalue the baht, causing the local-currency value of dollar debt to soar—a pattern which was then repeated in Malaysia, the Philippines and Indonesia. That alone would have been enough to send highly leveraged firms into distress or bankruptcy. But then global investors fled the region en masse, pulling out of positions indiscriminately. The result was a funding crisis in which short-term foreign debt could not be rolled over, leading to more defaults and the deepening of a multi-country economic slump.

In subsequent years, notes Clifford Lee, who runs the investment-banking division of DBS, South-East Asia's biggest bank, policymakers in the region began to impose more controls on inbound investment. This limited firms' access to capital, and hence their growth, but also prevented similar vulnerabilities from building up again. At the same time, notes Art Karoonyanich, also of DBS, Asian governments were busy privatising and listing state-owned firms.

The combination of capital controls, high savings rates and a series of "crown jewel" assets being listed, as Mr Karoonyanich puts it, breathed life into the region's own capital markets. Then, as much of the rest

America tightened its grip over foreign finance in the wake of the terrorist attacks of 2001

of the world fell into the financial crisis of 2007-09 and South-East Asia emerged relatively unscathed, governments started issuing big tranches of sovereign debt in their own currencies rather than in dollars. Now, says Mr Lee, bonds issued by Asian firms tend to be bought up regionally, as deep-pocketed domestic investors outbid counterparts in London and New York.

Meanwhile, in middle-income countries across the world, financial and economic institutions have grown stronger and better able to insulate themselves from the global financial cycle. Many have stockpiled foreign-exchange reserves, enabling them to defend their currencies from speculative attacks or crises. Central banks have become more independent, often adopting inflation-targeting mandates long favoured in the rich world. During the most recent global inflationary surge, monetary guardians in Brazil, Chile, Hungary, Peru, Poland and South Korea started raising interest rates well before the Federal Reserve and European Central Bank—and successfully cooled rising prices.

These developments have steadily chipped away at the West's dominant role in the financial system, and that has been largely for the good. Stronger institutions are an obvious boon. South-East Asian capital controls have helped stave off instability caused by volatile inflows and forced domestic markets to mature, providing a natural source of patient capital for the region's fast-growing firms. And they have done so without cutting the region off from international finance. The skyscrapers thronging Singapore's financial district are still adorned with the logos of multinational banks; foreign capital still flows in and out.

Less benign, though, is the second force reshaping the global financial system: its growing use as a weapon by America and its allies. Economic warfare is not novel. It dates back at least as far as an Athenian ban on trade with Megara, its neighbour, in 432BC. But its 21st-century incarnation, involving not just trade embargoes but the weaponisation of the financial system itself, has taken it to a new level. Trackable electronic payments, together with the dollar's preponderance in global finance and the centrality of American banks, have granted America's government an unprecedented level of influence. It has gained the ability to cut banks, or entire jurisdictions, out of the financial system. The inevitable result is that many are seeking alternatives to American-controlled levers of finance.

The long arm of Uncle Sam

America tightened its grip over foreign finance in the wake of the terrorist attacks of September 11th 2001. As the Treasury department searched for ways to prevent future attackers from accessing funding, it alighted on SWIFT, a global financial co-operative whose messaging services facilitate large cross-border payments. Its data could be used to track transactions and uncover links between terrorists and financiers. The same sort of financial mapping helped the Treasury find other ties, too—between foreign banks and countries under American sanctions. The Patriot Act, another product of the 9/11 attacks, then gave the Treasury the power to drive such banks out of business.

This weapon was notably deployed in September 2005, against Macau's Banco Delta Asia (BDA), and then again in February 2018, against Latvia's ABLV Bank. Both times the real target was North Korea. The Treasury accused the banks of enabling the regime to break international law, in part by helping to fund ▶▶



► its nuclear-weapons programme, and announced it was considering designating each bank a “prime money-laundering concern”. Under the Patriot Act, this step could lead to American banks being banned from providing “correspondent accounts” to BDA and ABLV, meaning they could no longer move dollars through America’s banking system. This would stop them from executing dollar transactions for their clients, effectively shutting them out of international finance. For other banks around the world, to continue doing business with BDA and ABLV would have been to risk designation as money launderers themselves.

How to lose a bank in ten days

The effect in each case was immediate and dramatic. Global banks withdrew funds from both en masse. Within weeks of the Treasury’s announcements, each faced a liquidity crisis and had its management seized by its regulator. The collapses came so quickly that the Treasury’s accusations could not be challenged in court until it was too late. Now, with the help of an executive order signed by President Joe Biden in December 2023, the Treasury can dole out the same treatment to any foreign financial institutions deemed to be supporting Russia’s military-industrial base.

America and its allies have other ways of excising their enemies from vital parts of the financial system. Since 2008 American banks have been banned from facilitating dollar clearing on behalf of Iranian banks, even for transactions beginning and ending outside America (such as a foreign firm buying oil priced in dollars). Sanctions imposed by the West on Russia’s biggest banks after the invasion of Crimea in 2014 prevent them from raising equity or debt capital in America and Europe; those introduced in 2022 forbid a far greater array of transactions and have cut them off from SWIFT. Such bans have significant knock-on effects beyond America’s borders. A study by Deloitte, a consultancy, in 2009 found that more than half of financial institutions used America’s sanctions list as a guide to which firms they could do business with.

All such sanctions incentivise those that might fall victim to them to devise workarounds, which means reducing their reliance on the parts of the financial system the West controls. For Iran, that means selling oil to privately owned refiners willing to risk America’s ire, and probably doing so in yuan or dirhams rather than dollars. For Russia it has entailed the construction of Mir, a card network run by its central bank to facilitate domestic payments in the absence of Western card companies. The question for China is whether any workaround is even possible to parry the sort of sanction America imposed on Russia in 2022, immobilising a central bank’s foreign-exchange reserves. This in turn raises another question: what effect would taking such action against China have on America?

The increasingly tense economic rivalry between America and China is the third force reshaping the global financial system. Like Russia, China has set up its own payments networks that are shut off from the West, in part to defang any future sanctions levelled against it. But for the more wide-ranging impact of Sino-American sabre-rattling, look to its effects on capital flows around the world.

The most obvious barriers raised by the two countries are in their cross-border investment-screening programmes. America’s Committee on Foreign Investment in the United States (CFIUS) has long scrutinised

inbound investments related to national security. But it has recently become much busier. In 2022, even as deal volumes fell, CFIUS reviewed 286 transactions, two-and-a-half times the number from a decade previously. Its powers have expanded, too, with Mr Biden directing it to focus on supply-chain security and technological leadership. Britain kick-started its own investment-screening regime in 2022, again for national security purposes, and reviewed 866 transactions in its first reporting year. Last year Japan added nine sectors, including semiconductors, to its screening regime for foreign investments. The EU too is contemplating beefing up its own screening rules.

More novel is America’s approach to outbound investment, which is to crimp citizens’ ability to adventure their wealth in new enterprises in at least one of the world’s quarters. An executive order signed last August directs the Treasury to vet investments in “sensitive technologies” (meaning advanced chips, quantum computing and artificial intelligence) in “countries of concern” (meaning China). The justification is that national security trumps investment returns, and that in any case the Treasury will only screen a narrow range of sectors. They just happen to be the sectors about which investors are most excited. And domestic political calculations may well ratchet up the level of vetting. CFIUS is reviewing a proposed takeover of US Steel, the holder of not-so-sensitive technology, by a company in Japan, a security ally. Robert Lighthizer, Donald Trump’s trade representative, has proposed widening CFIUS’s remit to include investments that would inflict “long-term economic harm” on America.

Hedging their bets

In the face of all this, it is hardly surprising that international firms and investors are taking action to avoid being caught on either side of the Sino-American divide. Sequoia, one of the world’s most successful venture-capital outfits, announced last June that it would split into separate American, Chinese and Indian businesses. Singaporean bankers talk of hordes of companies moving from China to redomicile in their own, more neutral territory—and even of firms choosing to list there rather than in Hong Kong, despite an expectation that doing so will yield a lower valuation.

A couple of years ago, says a Singaporean banker, the proliferation of cross-border screening rules might have prompted Chinese firms to think twice about whom to solicit as major investors. After all, there would be little value in getting a big chunk of supposedly patient capital from a Western outfit that was then forced to abandon ship by its government. But today that is less of a concern, since the mood has shifted so far that only those already affiliated with China would be likely to invest anyway.

The long-term implications of such fragmentation are worrying for the world economy. Free capital flows give investors more opportunities and firms more funding sources. What is more, the reversal of these flows amid geopolitical strife can cause all manner of problems. The sudden withdrawal of foreign capital can trigger crashes in asset prices, threatening financial stability. It can also make countries more prone to shocks, by removing the ability to diversify risk internationally. So far, that tipping point is some way off. But it is getting nearer: cross-border capital flows have fallen precipitously, and those which remain are increasingly oriented along geopolitical lines. ■

Firms don't want to be caught on either side of the Sino-American divide

Cross-border investment

Slow flows

The movement of global capital is in decline and is being rerouted by geopolitics

LISTEN TO AMERICAN officials describe the trade and investment barriers they are erecting against China, and you might think they are doing their utmost to limit the economic knock-on effects. “These steps are not about protectionism, and they’re not about holding anyone back,” Jake Sullivan, the national security adviser, recently told the Council on Foreign Relations, a think-tank in New York. Officials talk of a “small yard and high fence” when describing restrictions on doing business with China—that is, measures that are narrowly targeted to protect national security, if tough to circumvent. When Gina Raimondo, the commerce secretary, warns of some Chinese firms becoming “uninvestable” for American counterparts, she strikes an almost mournful tone, urging China to allow such partnerships to flourish again.

But the talk of limiting disruption is a fantasy. The prioritisation of national security above unfettered investment is reshaping the movement of capital across borders. Global capital flows—especially foreign direct investment (FDI)—have plunged, and are now directed along geopolitical lines. This has benefits for non-aligned countries that can play both sides, and, if it limits the volatility of capital flows, may do some good for the financial stability of emerging markets. But as geopolitical blocs pull further apart, it is likely to make the world poorer than it otherwise would be.

Cross-border capital flows come from investors’ portfolio positions, banks’ lending books and companies’ FDI. All types fell after the financial crisis of 2007-09, and have not recovered since. But the drop in FDI became more pronounced after the onset of America’s trade war with China during Donald Trump’s presidency (see chart on next page). A study by economists at the IMF published in April 2023 found that, as a share of global GDP, gross global FDI had fallen from an average of 3.3% in the 2000s to just 1.3% between 2018 and 2022. Following Russia’s invasion of Ukraine in 2022, cross-border bank lending and portfolio debt flows to countries that have supported Russia in UN votes fell by 20% and 60% respectively.

When the chips are down

To assess whether FDI has also been redirected over time, the IMF researchers analysed data on 300,000 new (or “greenfield”) cross-border investments carried out between 2003 and 2022. They found a rapid drop in flows to China after trade tensions ratcheted up in 2018. Between then and the end of 2022, China-bound FDI in sectors which policymakers deemed “strategic” fell by more than 50%. Strategic FDI flows to Europe and the rest of Asia fell, too, but by much less; those to America stayed relatively stable. FDI for China’s chip



sector plunged by a factor of four, even as FDI for chip firms rose sharply in the rest of Asia and America.

The IMF researchers then compared investments in different regions completed between 2015 and 2020 with those completed between 2020 and 2022. From one time period to the next, average FDI flows declined by 20%. But the decline was extremely uneven across different regions. America and countries in Europe, especially its emerging economies, came out as relative winners. FDI to China and the rest of Asia fell by much more than the aggregate decline.

The roster of relative winners—rich America and its closest allies—suggests that geopolitical alignment has played a part in diverting capital flows. Sure enough, it has become more important than ever. Measuring such alignment through UN voting patterns, the IMF researchers calculated the share of FDI flowing between pairs of countries that are geopolitically close. They found that this share has risen significantly over the past decade, and that geopolitical proximity is more important than the geographical sort (see chart on next page). The same correlation with geopolitical alignment is present for cross-border bank lending and portfolio flows, though to a lesser extent.

That none of this seems to provoke much angst or even interest from policymakers might seem surprising. Like free trade, free capital flows ought in ►►

► theory to provide more opportunities for businesses and investors, giving all a greater chance of getting rich. Long-term investment from big firms also supplies innovation, management expertise and commercial networks. For poor countries it matters especially. Foreign capital fosters growth where domestic savings may be lacking. And if global capital is free to move, you would expect its cost should be lower.

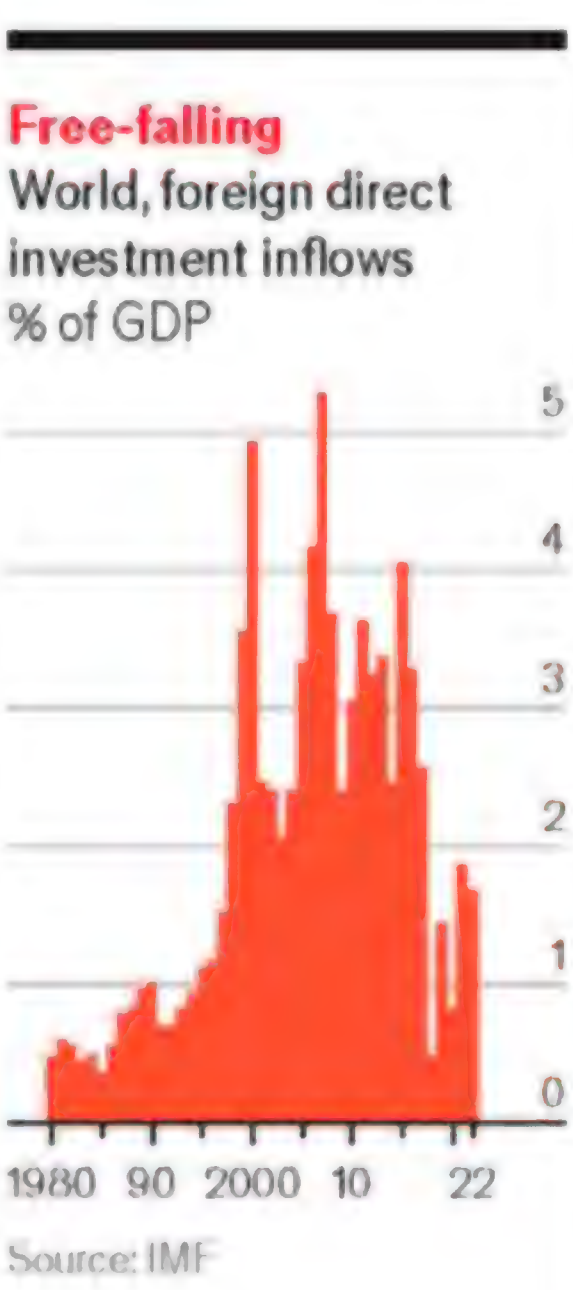
Slow down, you move too fast

Yet in spite of the vast scale of financial globalisation over the past three decades, with gross cross-border positions rising from 115% of world GDP in 1990 to 374% in 2022, gains have proved elusive to measure. That does not mean there have been no gains. But at the same time there is clear evidence that sudden inflows of foreign capital can cause financial crises.

A paper published in 2016 by Atish Ghosh, Jonathan Ostry and Mahvash Qureshi, then all of the IMF, identified 152 “surge” episodes of unusually large capital inflows across 53 emerging-market countries between 1980 and 2014. Around 20% ended in banking crises within two years of the surge ending, including 6% that resulted in twin banking-currency crises (far higher than baseline). Crashes tended to be synchronised, clustered around global financial convulsions. But the link between sudden floods of foreign capital and subsequent credit growth, currency overvaluation and economic overheating is hard to dismiss.

This provides ballast for the Asian policymakers who methodically reduced their reliance on foreign capital after the disaster of 1998 (see previous article). And indeed, the resilience of emerging-market countries over the past few years, as the Federal Reserve has tightened monetary policy at its quickest pace since the 1980s, has been remarkable. Then, the Fed’s tightening sparked a Latin American debt crisis; this time most big, middle-income countries managed to insulate themselves and weather the storm.

The trouble is countries with less risky capital flows are also losing FDI. Mr Ghosh and co-authors found that surge episodes dominated by FDI were less likely to end in crisis; it is sudden floods of bank lending that are destabilising. What evidence there is on the benefits of unimpeded capital also suggests that



FDI flows are best placed to spur growth and spread risk among businesses and investors.

The IMF study from 2023 modelled the impact of the world splintering into separate FDI blocs centred on America and China, with India, Indonesia and Latin America remaining non-aligned (and so open to flows from both sides). It estimated the hit to global GDP to be about 1% after five years, and 2% in the long run. The lost growth was concentrated in the two blocs; non-aligned regions stood a chance to benefit. But lower global growth—and the chance they could be forced to join a bloc—could turn this into a loss.

The real losers are the low-income economies that must contend with the worst of both the old world and the new. Lacking middle-income countries’ domestic savings rates, capital markets and foreign-exchange reserves, they are simultaneously reliant on foreign capital flows for investment and less insulated from their sudden reversals. Lacking economic heft, they are more vulnerable to being forced to choose a geopolitical side, restricting their access to funding. The dilemma has become familiar to such countries, and nowhere more than in the next arena of change for the global financial system: payments. ■

Transactions

A level paying field?

The proliferation of national payment systems spurs competition, innovation—and frictions

IN FEBRUARY 2022 protesters of Russian warmongering daubed their faces with paint, draped themselves in Ukrainian flags, and clutched signs bearing passionate messages about, of all things, the Society for Worldwide Interbank Financial Telecommunication (SWIFT). It made sense. As Russia attacked Ukraine, the West searched for ways to punish Vladimir Putin. Removing Russian banks from the primary network used to make large cross-border payments was an easy call. It would sever a crucial artery connecting the world to Russia’s financial system, adding to a battery of sanctions that would crush its economy.

But Mr Putin was ready. After Russia’s invasion of Crimea and eastern Ukraine in 2014, it faced the same threat of excision from SWIFT. “There are risks in using the global financial networks,” Elvira Nabiullina, the governor of the Central Bank of Russia, told CNBC in 2018. “Therefore, since back in 2014, we have been developing our own systems.” Those are SPFS, a financial messaging service to take the place of SWIFT for interbank transfers, and Mir, a card-payment network to replace Western providers such as Visa. Being cut off from parts of the global payments system in 2022 will have inconvenienced many of Russia’s corporate treasurers, and certainly has made cross-border transactions much harder. But it did not strike a fatal blow.

Russia is an extreme case of a broader trend: ►►

Realignment

Foreign direct investment, Q1 2015–Q1 2020 compared with Q2 2020–Q4 2022
Percentage-point difference from total change*

| → To ↓ From | United States | Americas excl. US | Advanced Europe | Emerging Europe | China | Asia excl. China | Rest of world |
|-------------------|---------------|-------------------|-----------------|-----------------|-------|------------------|---------------|
| United States | 0 | 9.2 | 0.6 | 19.4 | -40.6 | 2.3 | 21.6 |
| Americas excl. US | 18.6 | 27.3 | 14.9 | 34.0 | -13.3 | 5.9 | 27.5 |
| Advanced Europe | 7.5 | -11.7 | 9.3 | -0.9 | -19.7 | -9.8 | 8.6 |
| Emerging Europe | 27.6 | 2.9 | 9.9 | 18.1 | 13.9 | -22.3 | -11.5 |
| China | -22.1 | -6.9 | -17.8 | -31.3 | 0 | -44.3 | -31.9 |
| Asia excl. China | -3.2 | -8.7 | -11.7 | -2.4 | -49.2 | -23.7 | -4.4 |
| Rest of world | 26.4 | 7.1 | 5.3 | 11.4 | -24.7 | -3.7 | 18.6 |

Source: IMF

*10.5%

► national payments networks have sprung up around a world once dominated by Western ones. Mostly they have arisen not from a desire to dodge sanctions while invading a neighbour, but to provide vital digital infrastructure for the populations of fast-growing economies. Their architects also crave the revenue streams and political clout that come with the control of payment rails underlying global commerce. Yet they, too, have one eye on the West's weaponisation of the financial system, and are looking for ways to avoid falling victim to it. The most developed of these examples are in China and India.

Take China first. Around the same time Russia was developing SPFS, China was working on CIPS, another financial messaging system intended as an alternative to SWIFT. It was launched in 2015 and, though still a minnow next to its Western rival, is expanding quickly. As of March 1,511 financial institutions were using it—only 13% of SWIFT's 11,500-strong membership, but a number that has more than doubled since 2018. Leave Russia, a Ukrainian campaign group, claims that this figure includes around 30 Russian banks, further reducing the impact of Western sanctions by allowing them to make cross-border payments in yuan.

For now the volume of transactions made through CIPS is relatively tiny, averaging 482bn yuan (\$67bn) per day in 2023. SWIFT, by comparison, says it processes payments worth some \$34trn per day. But again, CIPS's numbers are climbing quickly: that \$67bn was 24% higher than the average daily volume during the previous year. Should its membership continue to soar, network effects have the potential to prompt explosive growth in transaction volumes.

At the same time, China's retail payment providers have also grown to rival Western incumbents such as Mastercard and Visa. UnionPay, a Chinese card network, is now the world's largest by transaction volume and is accepted in 183 countries. Alipay, a digital-payment service, is accepted by 80m merchants worldwide, compared with Visa's 100m.

Owing to its antipathy to the West, China's burgeoning payment systems garner the most attention. But it is in India that the most exciting innovation has taken place. Unified Payments Interface (UPI) started operating in 2016. By March 2023, it was processing transactions valued at some 139trn rupees (\$1.7trn, or 50% of GDP) over the previous 12 months. UPI now accounts for more than three-quarters of India's digital retail payments. PwC, a consultancy, reckons that by 2027 that share will rise to 90%, even as the total volume of digital payments quadruples.

Free and easy

UPI allows users to make fast, cost-free payments by sending a text or scanning a QR code. It has made life easier, cheaper and more secure for businesses and consumers up and down the country. At the same time, the digital-identity system UPI is linked to has revolutionised the Indian state's welfare system. Hundreds of millions of people can now receive "direct benefit transfers" to bank accounts linked to their digital IDs, rather than as physical cash. This reduces the potential for such payments to be syphoned off by corrupt officials, and simplifies the disbursing of emergency funds (as during the covid-19 pandemic).

Now UPI is going global. It is linked up to payment systems in Sri Lanka, the United Arab Emirates, Singapore, Mauritius and Bhutan. In February the interna-

**Governments
will be tempted
to insist
domestic firms
stick to their
own payment
systems**

tional arm of the National Payments Corporation of India (NPCI), a state-backed nonprofit which manages the platform, announced its expansion into France. The *Times of India* reports that NPCI has signed agreements to allow QR-based UPI payments in Malaysia, Thailand, the Philippines, Vietnam, Cambodia, South Korea, Japan, Taiwan and Hong Kong.

Meanwhile, India is using the technology behind its digital infrastructure to increase its influence abroad. Since 2018 the Modular Open Source Identity Platform (MOSIP), a nonprofit in Bangalore, has made a publicly accessible version of the code underlying India's digital-identity system available to other countries. The idea, says Kalpana Kochhar of the Bill and Melinda Gates Foundation, which supports MOSIP, is to allow developing countries to build digital public infrastructure suited to their own needs, rather than relying on others. This could go beyond digital payments to include health-care records, public-sector budgeting and management of utilities such as water. Pilot projects are under way in 17 countries—including Ethiopia, the Philippines, Morocco, Madagascar and Niger—and have registered IDs for 109m people.

Developing such infrastructure would be an obvious boon for the countries piggybacking on India's success. It would probably also provide a fillip to Indian IT firms which, already familiar with the plumbing beneath UPI, would be in pole position for consultancy work in the countries deploying MOSIP. Ms Kochhar hopes that, being built along similar digital rails, payment systems based on open standards like MOSIP will be more easily "interoperable". If such hopes are realised, the resulting connections could one day create an Indian-run alternative to SWIFT and CIPS beyond the control of either America or China.

Network affects

Could the proliferation of payment networks benefit not just the countries deploying them, but also the global financial system? The increased competitive pressure on incumbents, and the innovation and service improvements it spurs, is welcome. SWIFT has become notably less clunky to use in recent years, notes a senior executive at one global payments firm. Its transaction fees have fallen, too, by a factor of four over the past ten years after adjusting for inflation.

Yet the new networks also bring the risk of fragmentation. Given their uses for evading the scrutiny of geopolitical rivals, governments will be tempted to insist domestic firms stick to their own systems.

Even without such barriers being thrown up, the proliferation of national networks creates new frictions. SWIFT still has a role to play in linking up payment systems, but the difficulty is that every network has its own standards for data, security and privacy. Finding ways for them to share the information needed to execute cross-system transactions therefore grows harder as more and more systems are connected. It also raises costs for big institutions that want to operate across multiple networks, since they must maintain separate capital pools on each one. Compared with using only one system, that means they are less able to net transactions off against each other, and so need to move capital more frequently.

Nor is the fight to dominate global payments simply a question of which system comes out on top. It is also part of a bigger battle: to dethrone the dollar from its position as the world's reserve currency. ■

Currency wars

The fight to dethrone the dollar

Attempts to challenge the greenback have only strengthened its dominance

IN 2018, EUROPEAN officials watched President Donald Trump blow up a nuclear deal with Iran, reimpose sweeping sanctions and mull disconnecting its banks from SWIFT. They had had enough. America was using its financial hegemony to muscle allies into punishing its latest victim. European firms were fleeing Iran for fear of secondary sanctions from America.

Britain, France and Germany decided to put up a fight. Their answer was the “Instrument in Support of Trade Exchanges” (INSTEX), a barter system that could support humanitarian trade with Iran without any recourse to the dollar. Seven more EU states signed up. In March 2020 INSTEX’s inaugural transaction supported a sale of medical goods to Iran.

But INSTEX’s debut trade turned out to be its last. The Islamic Republic blocked multiple proposed deals. European firms feared that bartering alone might incur America’s wrath. INSTEX quietly folded in 2023, three years after it opened. Instead of offering an alternative to the dollar, it ended up highlighting the unassailability of the greenback’s position.

The episode captured in microcosm the scramble to erode the dollar’s pre-eminence. The world has many reasons to want strong alternative options. An

erratic Washington has turned forecasting long-run economic policy—and thus the dollar’s value—into a mug’s game. Politicians engage in periodic stand-offs over whether to lift a cap on the national debt which, if not lifted, could result in a default, endangering Treasury bonds’ status as the world’s safest asset. Over the past few years, the Federal Reserve has allowed inflation to rise more dramatically than at any time since the 1980s, and has yet to bring it fully under control.

Yet in spite of these incentives to shun the dollar, no other contender has come close to stealing its crown as the world’s reserve currency. Instead, argues Eswar Prasad of the Brookings Institution, the real jockeying for position has taken place among other currencies—a process he calls “fragmentation of the second tier”. Counterintuitively, even as the reasons to avoid it have piled up, the dollar’s dominance over its nearest competitors has grown stronger than ever.

If you liked it you should have put a ringgit on it

Nowhere is this more obvious than in the proportion of currency trades involving the greenback. Since the turn of the 21st century this has held steady at between 85% and 90%. Part of that ubiquity derives from the dollar’s use in global payments, trade and capital flows. But it is also linked to the central role the currency takes for foreign-exchange dealers. If you want to sell pounds sterling for yen, you can do so directly; if it is ringgits for zlotys, you might struggle. Instead, you would sell the ringgits for dollars and then use those to buy the zlotys. The FX market benefits if a single currency assumes this linchpin-like role, as it allows separate pools of liquidity for more rarely traded counterparts to be grouped together.

Meanwhile the fortunes of other currencies have fluctuated. In 2001 the euro was a rising contender: it was used in a bloc of countries with comparable economic output to America, and was present in 38% of FX trades. But over the next two decades, as other currencies like China’s yuan became more widely used, they bit chunks out of the euro’s share of transactions—more than they did from the dollar’s. By 2022 the euro’s share had dropped to 31%. The Japanese yen fared similarly. And so the dollar’s lead over its closest rivals grew. In recent years, so has its use in cross-border payments. It accounted for 47% of those made via SWIFT in January, up from 38% three years earlier.

Similar trends are apparent in the currency split of central bank reserves. Such foreign-exchange reserves exist to be deployed during times of turbulence or crisis. That means they must be able to be sold at the drop of a hat, and should ideally comprise a mixture of the domestic currency’s biggest trading counterparts.

These incentives ensure that, once again, the dollar wins (see chart on next page). Although the euro’s share rose in the decade after its creation, to 28% in 2009 compared with the greenback’s 62%, it tumbled after the ensuing euro-zone debt crisis, to 20% in 2023 against the dollar’s 58%. The yuan and the Australian and Canadian dollars each grew to more than 2% of reserves. But as with the FX market, their rise came at the expense of the greenback’s top competitors.

The dollar’s preponderance has held even in the face of the West’s immobilisation of the Central Bank of Russia’s foreign-exchange reserves, in 2022. America’s geopolitical rivals might want alternatives, but none could match the dollar’s liquidity or centrality in global trade. They would thus be worse at fulfilling ►►



► the stabilising function of reserves in the first place.

The dollar's appeal looks durable in other ways. Unparalleled demand lowers interest rates on dollar debt, making it the preferred choice for firms and governments borrowing in foreign currencies. (Roughly half of all cross-border bank loans and debt securities are denominated in dollars.) A common faith that the Fed has more firepower than other central banks ensures that the dollar strengthens in a crisis even if, as in 2008, the worst of the trouble emanates from America itself. That in turn means that dollar assets, especially Treasury bonds, are seen as safer than others and so are considered more useful as collateral.

Efforts to promote whizzier alternatives have faltered. Cryptocurrencies such as bitcoin are subject to wild swings in value, making them unreliable units of account or stores of value—two crucial functions for a currency. The digital “stablecoins” that have overcome this deficiency via pegs to proper currencies are more useful. But only those linked to the dollar (and therefore ultimately relying on dollar payments) have gained anything approaching widespread use.

Central banks are gradually starting to mint their own digital currencies. The biggest pilot project, the People's Bank of China's digital yuan, had hit a total transaction volume of just 1.8trn yuan (\$250bn) by June 2023. Even if such digital currencies do take off, at least one would need to show how it could be uniquely useful—and well ahead of America doing so—to yield a meaningful advantage over the greenback.

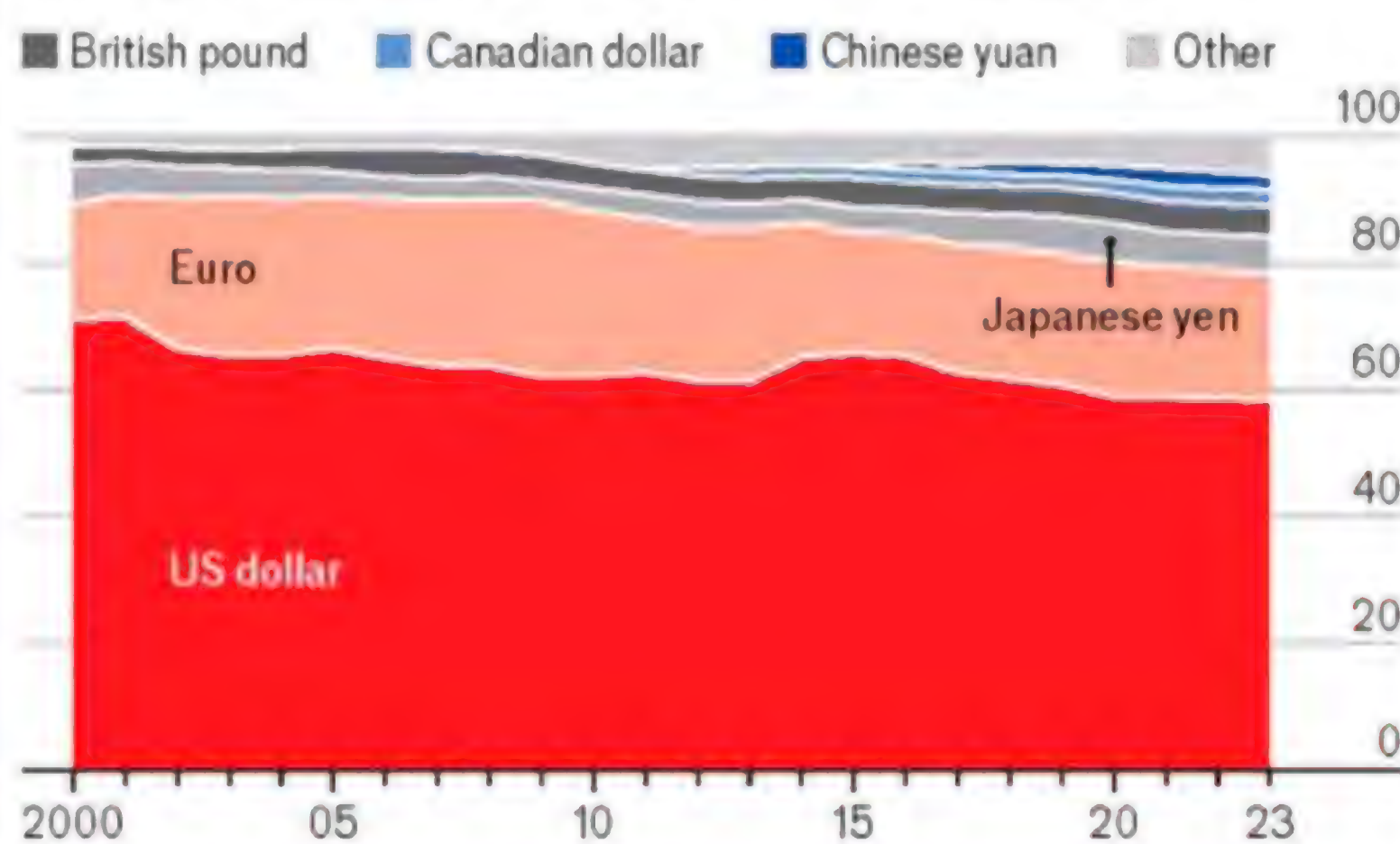
Uncommon currency

Other potential threats to the dollar still loom. The growth of alternative payment systems, and of transactions that have no need for the dollar, could accelerate, due either to overreach by Western sanctions or network effects from rising membership. Should China's CIPS be the main beneficiary, the yuan's fortunes might soar (though capital controls would make foreign central banks wary of relying on it as a reserve currency). For now, even within China, last year was the first in which cross-border payments in yuan edged past those made in the dollar.

Judging by the world's previous reserve currency—the pound sterling, which declined for decades before being superseded by the dollar—such changes are likely to proceed at a glacial pace. That is, unless the transformations of the global financial system examined in this report are supercharged by a new crisis. ■

Bucking the tide

Global allocated foreign-exchange reserves, % of total



Source: IMF



Sino-American conflict

Future shock

How the global financial system would respond to a superpower war (not so well)

THE IDEA that economic integration can safeguard peace is old, intuitive and spectacularly wrong. In a popular book of 1910, the economist Norman Angell argued that great-power conflict was irrational, since “the complexity of modern finance makes New York dependent on London, London upon Paris, Paris upon Berlin, to a greater degree than has ever yet been the case in history.” A century later, similar wishful thinking in western Europe fostered the building of Nord Stream 2, a gas pipeline from Russia to Germany. In a globalised world, war has no winners. But that did not stop Europe from digging trenches in 1914, nor ►►

► Russian troops from storming Ukraine in 2022.

It is tempting to conclude that the fragmentation described in this special report—of capital flows, payment networks and financial institutions—might be spurred by geopolitics, but has little bearing on it in return. A single, globalised financial system is neither necessary nor sufficient for peace. As they chip away at it, officials from Washington to Beijing might regret the opportunities and connections being lost. They need not worry they are hastening Armageddon.

Yet they are certainly making war more feasible, while simultaneously normalising the sense of conflict between nations. A world in which countries bar foreign investment in “strategic” industries is one that will create all sorts of friction between enemies (as well as friends). That world is arriving: witness President Joe Biden attempting to block the acquisition of US Steel by Nippon Steel—a competitor from Japan, one of America’s closest allies. And companies are throwing up financial firewalls themselves as they adapt to each new wave of sanctions. Economic integration might not ensure peace. But with the costs of disengagement increasingly being borne already, the marginal cost of war is falling.

That is not to suggest the cost would be anything other than enormous. For a sense of the turmoil that would engulf financial markets, look to the latest stress test prescribed by the Bank of England. “A sudden crystallisation of geopolitical tensions causes a sharp deterioration in expectations of economic fundamentals,” begins the Sahara-dry description of the warlike scenario the City of London is required to simulate. Stocks tank, volatility explodes and investors scramble to de-risk their portfolios. Ominously, big sovereign-wealth funds start dumping American, British and euro-zone government debt. By day ten a mid-sized hedge fund has defaulted and “there are no signs of tensions abating even in the medium term”.

War, what is it good for?

Should one much-discussed catalyst for war come to pass—an invasion of Taiwan by China, opposed by America—the bank’s scenario seems worryingly plausible. As in 1914 and the 1930s, the government bonds of key belligerents would come under significant pressure. For American Treasuries this would be balanced against investors’ wish to de-risk and their reputation as the world’s safest asset. But even then, anticipation of ballooning defence spending on top of existing deficits, leading to bumper bond issuance, might well send yields soaring and prices crashing. With supposedly safe asset prices plunging, all sorts of financial institutions would start to wobble. Think of the hedge funds and banks that fell over in 2022 and early 2023, writ large. This time, the danger of a systemically important outfit collapsing would be all too real.

Stockmarkets, too, would be in freefall. Taiwan produces the world’s most advanced semiconductor chips. This hardware is vital to companies everywhere, but especially to America’s tech giants. The “Magnificent 7” alone (Microsoft, Apple, Nvidia, Amazon, Meta, Alphabet and Tesla) comprise more than a sixth of the value of MSCI’s broadest index of global stocks. At a stroke, a Chinese blockade of Taiwan could snap their supply chains and send share prices plummeting. And that is before considering the impact of the trade sanctions that would surely follow from America and its allies, the tit-for-tat response from China and the

hit to non-military economic output. Shareholders of all stripes would, with good reason, be stampeding towards rapidly narrowing exit doors.

Amid all this, it is difficult to imagine the world’s financial system surviving in its present, still-globalised state. Just how far it fragmented would depend on the belligerence of policymakers in Washington and Beijing. They would probably stiffen cross-border investment barriers to prevent domestic firms from sending capital anywhere it might enrich the enemy. Capital flows between geopolitical blocs, already far smaller than in globalisation’s heyday, would dry up further.

The same impulse would apply to payments. It is easy to imagine Chinese banks being shut out of SWIFT and dollar clearing—but harder, given the time they have had to prepare for such treatment, to see these measures being game-changers. The greater effect would be to force the division of global payments into separate spheres of influence, thereby accelerating the growth of China’s CIPS network. In time, Indian initiatives to export open-source, UPI-like systems might provide other countries with more palatable alternatives. For now, that is some way off.

As for the dollar’s dominance, its prospects would depend on the position in which the conflict left America. The world’s previous reserve currency, the pound sterling, was dethroned after decades of decline followed by two all-out wars that dissolved Britain’s empire and left it saddled with debt. Small wonder that it also lost its financial hegemony. Short of something similarly catastrophic befalling America, it is difficult to see the dollar losing its pre-eminence.

In fact even if investors were to do the unexpected and dump their greenbacks, it would at least in the near to medium term perversely strengthen America’s financial position. Eswar Prasad of the Brookings Institution points out that its foreign liabilities, denominated in dollars, sum to \$51trn, while its foreign assets, often denominated in other currencies, total \$33trn. From an American perspective, a weaker dollar would leave the liabilities unchanged but the assets more valuable. It would be the foreign owners of dollar debt who would take a hit.

None of these changes would decisively alter the course of a superpower war. The temptation then for America and China would be to go further, threatening foreigners with secondary sanctions should they continue to do business with the enemy. In effect, they would force the world to pick a side and shun the other. Such measures would seem especially appealing to America: with the linchpin-like role its currency and banks still play in international finance, many countries would abandon their remaining economic links with China. They would also be the final nail in the coffin for a financial system that is in any sense global, and the biggest incentive yet for non-aligned countries to leave America’s orbit altogether.

Even without the catastrophe of a war between the world’s superpowers, their urge to turn its financial system into ever more of a battleground shows no signs of fading. If only it would. In spite of its flaws, there is a good deal to recommend today’s setup. It is no longer just a few Western countries that can access the growth-spurring benefits of international finance while insulating themselves from its recurrent crashes. There is the tantalising promise that technology can bring even more into the fold. What a waste it would be to divide the world into parochial blocs instead. ■

The marginal cost of war is falling

Acknowledgments A list of acknowledgments and sources is included in the online version of this special report

Licensing our content

For information on reusing the articles featured in this special report, or for copyright queries, contact *The Economist* Syndication and Licensing Team. Tel: +44 (0)20 7576 8000; email: rights@economist.com

More special reports

Previous special reports can be found at [Economist.com/specialreports](https://www.economist.com/specialreports)

Europe



War in Ukraine

Holding Europe's line

KHARKIV AND KOSTIANTYNIVKA

Ukraine's defenders dig in for Russia's coming assault

BATHED IN AFTERNOON sun and the scent of lilac, the hamlet near Kostiantynivka, a small town in Ukraine's Donbas region, could be a picture of bucolic peace. But the sounds of birds and lawnmowers are interrupted by the constant boom of artillery less than 10km away. The few remaining villagers go about their lives, paying little attention to the pickup truck parked outside a small brick cottage. At first glance the cottage seems little different from the village's other houses, with their little vegetable plots round the back.

But walk inside and you find yourself in the headquarters of the air-defence battalion of Ukraine's legendary 92nd assault brigade. It is currently fighting in Chasiv Yar, the most intense part of the Donbas front. Behind the house, steps lead down through a trench and into a large van, dug into the ground and covered in camouflage. Inside this command centre, officers monitor two screens. One shows radar images of the skies above the front line and

some 50km into Russian-held territory. The other shows a half-dozen live feeds from Ukrainian reconnaissance drones.

"This used to be an old Soviet radio station, but we have gutted it and installed this equipment given to us by volunteers. We did it all ourselves," Lieutenant Colonel Alexander Timchenko, commander of the air-defence unit, says proudly. Plots on the monitor show the flight paths of Russian jets, helicopters and missiles. Lines showing Smerch rockets travelling at 1,400kph (900mph) criss-cross the screen;

one heads directly towards the hamlet, but passes overhead. A Russian warplane comes close to the front, releases its bomb and makes a U-turn. Less than a minute later the glide bomb (a regular bomb fitted with fins to greatly increase its range) disappears from the screen, exploding well inside Ukraine.

Colonel Timchenko's air-defence unit cannot hit the Russian planes and has no way of intercepting glide bombs. Its job is to warn artillery units and mobile groups operating along the front. Hidden in the brush on a hill a few kilometres from the hamlet, three of the battalion's 250 men huddle around a Strela-10, an old Soviet short-range mobile surface-to-air missile system. Designed to bring down NATO planes, it now hunts Russian drones. In the eight months that Colonel Timchenko has been here his men have shot down 50.

Tall and composed, the commander is a Russian-speaker from Kharkiv. He has been fighting since February 2015, a year after Vladimir Putin first invaded Crimea and the eastern Donbas, supposedly to "save" Russian-speakers like him. The war, he says, is not about language, ethnicity or even territory, but a way of life. "I don't want to be part of Russia. I don't want to go to prison for expressing my opinions. I want my children to grow up in a normal country, maybe not a rich country, but a free country." An avid reader of Alexander »

→ ALSO IN THIS SECTION

41 Selling war trophies

41 Protests in Georgia

42 Romania's hard right

42 Israel at Eurovision

43 Charlemagne: National days

► Solzhenitsyn, he does not want to live in a new “Gulag Archipelago”.

The purpose of the fighting around Chasiv Yar is not to retain every inch of land, but to prevent the Russian army from sweeping across the rest of Ukraine and taking its main cities, including Kharkiv, Dnipro, Odessa and Kyiv. Similarly, Mr Putin is not interested in the Donbas for its territory; he is trying to subjugate Ukraine and end its quest to become part of the European order. Last week Emmanuel Macron, France’s president, told *The Economist* that this order could perish “much more quickly than we think”. Ukraine is where the fight is taking place.

A year ago, as Ukraine readied for its counter-offensive, just holding its own positions was considered the most pessimistic scenario. Now, as Russia prepares for a fresh push, it is considered the best case. From soldiers to generals, everyone *The Economist* spoke to over the past week knows that Ukraine lacks the resources to get back to its 1991 borders, as its politicians have promised. “I suggest to anyone who talks of 1991 borders to come as far as Bakhmut,” Colonel Timchenko says, referring to a town Ukraine lost a year ago after months of savage fighting.

At stake now is not Ukraine’s territorial integrity, but its survival. Slowing Russian forces in the Donbas is crucial. Colonel Pavlo Fedosenko, commander of the 92nd, who helped liberate Kharkiv province in September 2022, is now fighting some 350km south-east of the city. “Everyone knows that if we don’t fight for Kostiantynivka and Druzhkivka [Russia’s probable next target], Russian forces will be in Dnipro, Kharkiv, Kryvyi Rih a few weeks later,” he says. He thinks there is a “70% chance” that Russia can occupy the rest of the Donbas region. The question is how long it might take, and how much damage Ukraine can inflict in the process.

Dribs and drabs

Fearing escalation, the West has never given Ukraine all the weapons it needs. After a six-month gap in American supplies caused by Republican obstruction, it has enough ammunition to survive but not to defeat Russia’s forces. By the time a new American aid package was approved on April 24th, it was rationing ammunition. Colonel Fedosenko says he was down to five shells a day for his American Paladin howitzers. “What am I supposed to do with this number of shells? My men were fighting with spades in trenches.” He hopes the \$61bn package’s effects will be felt in days, as many of the weapons have been pre-positioned in Poland.

Although Russia has the edge in shells and manpower, Colonel Fedosenko feels it may have reached its peak. Only a few weeks ago, he says, Russian infantry

backed by ten to 20 armoured vehicles and tanks were launching assaults every two to three hours. Now they attack only every five days or so, using motorcycles and quad bikes to avoid kicking up dust and advancing in small groups to hunt for weak spots.

Some 70% of the Russian soldiers in such assaults are former convicts, says Colonel Fedosenko. He also sees Tajik, Uzbek, Turkmen, Cuban and Somali mercenaries. Many soldiers have never been in combat before. “Our interceptions suggest they are scraping the barrel, using whoever they can force into battle—cooks, builders, mechanics, anyone.” He knows that many Russian soldiers have no choice. “Most of the prisoners I take are guys from small towns and villages. They tell us that either they get killed here or they get killed there if they run.” Some shoot themselves rather than surrender.

For now, however, Russian forces continue to advance. While Ukraine is not collapsing, it is losing about 20 sq km a week. Mr Putin may want to inflict maximum damage before NATO’s 75th anniversary party in July, to humiliate the West and force Ukraine into negotiations. But since he has not advertised his fresh offensive he would not need to admit its failure either.

Meanwhile, Mr Putin is strangling Ukraine’s economy by knocking out much of its electricity generation and wearing down the civilian population by bombing cities. Kharkiv, which is already rationing electricity, is being hit by glide bombs al-

most daily. Yet the city of more than 1m people is keeping calm and carrying on. On a sunny afternoon last week, residents strolled through a park and attendants went on emptying rubbish bins, even as two glide bombs landed with huge explosions less than a kilometre away. Keeping the city functioning and clean is a way to stand up to destruction and chaos.

With around 50,000 fresh Russian troops gathering across the border some 40km away, Kharkiv’s commanders know they may be a target in Russia’s next push. One scenario would be to isolate the city by cutting the main road to Kyiv. Another would be to move some 10km closer, putting the city’s eastern outskirts within artillery range and creating a buffer zone to protect Belgorod, a Russian city that is being hit by Ukrainian drones.

Konstantin Nemichev is the commander of the famous Kraken regiment, a special-forces outfit formed in the early days of the invasion in 2022 that defended Kharkiv. He expects the enemy to attack the province again in mid-May, but reckons they will fail to get near the city. Interviewed outside a ruined school building in the east of town, the site of an intense firefight in 2022 in which invading soldiers were wiped out, the commander says the defence is much stronger now. It has three lines of fortifications and a full brigade to stop the Russians. “They can move a few kilometres into the province,” he says, “but I don’t think they can get as far as 10km.”

The Ukrainian armed forces know they have no choice but to fight on. “We can either fight for Ukraine against Russia, or we will be overrun and forced to fight for Russia against Europe,” says Oleg Tkach, a lieutenant colonel in the 3rd tank brigade, which defends the Kharkiv region. But this sense of urgency and existential threat, he says, needs to penetrate into the whole of Ukrainian society. “People need to know the truth,” he says. And Ukraine needs unity as it enters a new stage of conflict.

So far this war, the biggest in Europe since 1945, has been extremely localised. For most of the country it almost seems a distant reality. But as Russia presses again, it will knock on everyone’s door. Anyone who wished to fight for Ukraine has already enlisted. Now conscription is cranking up. Any man between 25 and 60 who lives in Ukraine knows it could be his turn next. On May 8th parliament passed a law allowing some convicts to enlist and have their sentences erased (though unlike in Russia, murderers and other serious criminals are not eligible). Pressure is building on Ukrainian men who have fled the draft to return. “If they don’t come back, they may not have a country to come back to,” says Colonel Timchenko in his dugout near Kostiantynivka, as he studies the screens showing waves of incoming Smerch rockets. ■



War economics

The shrapnel dealers

Selling war trophies to buy weapons for Ukraine's army

STRANGE PACKAGES often arrive at Greg's flat in Zaporizhia, in south-eastern Ukraine. Sometimes they contain military jackets, helmets and backpacks. But armoured plates and fragments of destroyed rockets are also common. These war trophies are sent to him by Ukrainian soldiers on the front line, so he can sell them online. Sometimes the goods are too gory to trade. "I had a helmet with parts of brain attached," says Greg, who like other dealers did not want his full name used.

War trophies have been traded since ancient times. Since Russia's full-scale invasion of Ukraine two years ago, the trade has moved online. Russian helmets, some with their owner's name inscribed, can fetch more than \$1,400 on eBay. Other items range from Spetsnaz uniforms to bits of downed Sukhoi fighter jets. Some sellers turn military wreckage into key chains that sell for \$200. Items can move from corpse to buyer in days. Dealers argue the trade keeps Westerners interested in the war. "It's marketing," reckons a seller.

The demand for war trophies has created a fast-moving underground supply-chain. First, dealers contact the soldiers. Some, such as a group called Outdoor United (because of their love of mountaineering), go to the front line to pick the best treasures. Others, like Greg, who worked as a composer before the war, prefer to get mystery packages in the post. Another dealer, an injured veteran, runs a service where buyers request a specific item; his friends at the front then hunt for one.

Next buyers need to be found. Outdoor United send trophies to Babbs, a recently retired British paratrooper, to sell on his website Apostle Tactical. Others rely on platforms like eBay and Etsy. Buyers tend to be military memorabilia fanatics, based in Europe and America. Some have "museum-quality displays", says Babbs, complete with "bloodstained uniforms on mannequins". He says customers specifically request items with bullet holes.

Threats to the supply-chain do not stop at the front line. Many dealers claim that eBay removes gorier items from listings, bans sellers and freezes money for items that have been bought. This has pushed some to set up specialist websites. Military items are also, in theory, banned from leaving Ukraine. When an item is sold, a network of volunteers, manned mainly by foreign fighters, springs into action to smug-



A gruesome business

gle the goods to customers.

Finally, profits are returned to the front line. Many dealers do not take a cut and most troops do not ask for cash. Instead they request medicine, clothing and equipment. Greg uses the proceeds to build homemade drones for the army. Babbs has received a certificate from a Ukrainian lieutenant colonel as thanks for the sheer volume of gear he has gathered. "One shelling and you can run out of all your equipment," says an Outdoor United member. "They want equipment because the West has left us alone to fight." ■

Georgian protests

Dream a little dream of EU

TBILISI

Protests against a law that threatens the country's candidacy

BIDZINA IVANISHVILI, the Georgian oligarch who dominates the country's politics from behind the scenes, emerged on April 29th for a rare public appearance. It was an ominous one. He accused the West of using Georgian NGOs and opposition parties to organise a "revolution" against his party, and promised retribution after elections this autumn. Anti-government protests, meanwhile, have been growing. After police used tear gas to break up demonstrations, shops in Tbilisi quickly sold out of gas masks and goggles as protesters girded for more.

The most serious political crisis in the 12-year rule of the Georgian Dream party is entirely of its own making. It was prompted by the party's unexpected reintroduction in early April of a "foreign agent" law that would require NGOs and media out-

lets which get more than 20% of their funding from abroad to enter themselves into a public registry. The party tried to pass the same law in 2023. Then, too, it spurred huge protests and sharp warnings from Georgia's American and European partners. The law looks like an imitation of similar measures in Russia, which has used the "foreign agent" label to silence critical voices. The resistance drove Georgian Dream to withdraw the bill.

The decision to bring it back now at first appears foolhardy. Party leaders insist it is needed to regain sovereignty from an NGO sector propped up by Western money. In a rally to drum up support for the bill, Mr Ivanishvili, who founded the party and is now its honorary chairman, claimed that opposition leaders are "ordered and directed by their masters from outside". The speech set off alarm bells in Western capitals, which are accustomed to more deference from Tbilisi. The State Department issued a statement headlined "Georgia's Western Trajectory at Risk" and calling the law "Kremlin-inspired".

Georgian Dream still says it wants to join the European Union, and the country gained candidate status last year. The party's leaders may be inspired less by Russia than by Hungary's Viktor Orban, who passed a similar foreign-agent law in 2017 (though Europe's top court struck it down). In his speech, Mr Ivanishvili promised to enter the EU by 2030, but on conditions that evoked Mr Orban's populist rhetoric. "It is with [our] unique national traditions and identity that we should join the common European family," he said.

The party's opponents, though, doubt the sincerity of those European intentions. Many of the young people who have been gathering for nightly protests in front of parliament are convinced that the party is carrying out orders from the Kremlin and see the law as a deliberate attempt to spoil Georgia's bid to join Europe. "They are serving the Russian government, they have been given their assignment," said Misha, a protester who declined to give his last name. "We have to fight for Georgia's European future. We are fighting for this European future for the past 30 years."

Some foreign analysts agree that Mr Ivanishvili wants to prod the EU to quash his country's candidacy. Following the bloc's rules limits his ability to run the country as he would like. Within Georgia, both political camps see the battle in existential terms. It is difficult to imagine either backing down. The protesters, bolstered by huge numbers of young people, have energy and will eventually wear out police officers, says Vano Abramishvili, an analyst. "They are in a zugzwang," he said, using a chess term for a position in which every move is a losing one. "There is no soft way out of this any more." ■

Romania's right

Fans of the other Vlad

BUCHAREST

Hardline nationalists look strong in a big election year

IT IS NOT clear that most populist nationalists think Europe was ever great. But “Make Europe Great Again” was the slogan on the baseball caps at an international hard-right conference in Bucharest at the end of April sponsored by the Alliance for the Unity of Romanians (AUR), the country’s nationalist anti-immigration party. Speakers denounced the “invasion” of Europe by Muslims, and of America by illegal migrants. There was lusty applause when Donald Trump’s name was mentioned, and when speakers denounced gay and trans “ideology” and the “godless” bureaucrats of Brussels.

For AUR the powwow, held in the vast halls of the parliament building, was less about forging international unity than domestic campaigning. Romania is holding four sets of elections this year. The party is adept at publicity: its TikTok videos are slick; its giant election posters feature Vlad Dracula, the Romanian hero and medieval prince also known as Vlad the Impaler. The results of the elections will “set the political agenda for the next ten years”, says Remus Stefureac, the head of Inscop Research, a polling firm. On June 9th Romanians vote in European and local elections. Later in the year they will vote in presidential and parliamentary ones.

Romanians were shocked when AUR, founded in 2019, took 9.1% of the vote in a general election the following year. The current government is a grand coalition of the centre-right National Liberals and the centre-left Social Democrats. For much of 2023 AUR was the second-most popular party, with about 20% support in opinion polls (it has since dipped to 17%). That led the ruling parties to run on a joint slate for the European elections. Marcel Ciolacu, the prime minister, vowed “to defend Romania from extremism”.

The four main planks of AUR’s programme are freedom, Christianity, family and the “unity of the nation”. These are vague enough to draw a wide spectrum of supporters, including hard-right xenophobes, opponents of gay marriage and eco-nationalists who believe that foreign firms are unfairly exploiting Romania’s natural resources. The party is also popular, says Mr Stefureac, with Romanians abroad, who feel snobbish westerners treat them as second-class Europeans. The alliance of the two big centrist parties has created more space for radical opposition.

Eurovision

Singing past Gaza

Israel defies its critics at Eurovision

THE RULES of the Eurovision song contest are clear: no politics. That might not seem hard for a pop-music showcase, but when contestants represent their countries, politics tends to get involved. The victory in 2014 of Conchita Wurst, a drag queen from Austria, seemed to rebuke Russia’s homophobic government, which had invaded Ukraine. Two years later Ukraine won with a song by a Crimean Tatar about Stalin’s deportation of her ancestors.

This year’s contest, from May 7th–11th in Malmö, in Sweden, is the most politicised yet. Israel is taking part even as its war in Gaza rages. In February the European Broadcasting Union (EBU), an alliance of national broadcasters that

runs the contest, considered disqualifying the country because the lyrics of its entry, “October Rain”, seemed to refer to Hamas’s terrorist massacre of Israelis on October 7th. The deaths of thousands of Palestinian civilians in Israel’s subsequent invasion of Gaza led Scandinavian musicians to petition the EBU to ban the country, as it had banned Russia in 2022 after its full-scale invasion of Ukraine.

Israel has taken part in Eurovision since 1973 and won four times. The contest is an important symbol of international acceptance in a country that feels beleaguered and isolated. So the Israeli contestant, Eden Golan, fiddled with her song’s lyrics to placate the EBU; it is now called “Hurricane”. The EBU cannot simply ban Israel, explains Dean Vuletic, a historian who studies Eurovision. The country is not under Western sanctions. Moreover Israel’s state broadcaster, an EBU member, is fully independent, whereas Russia’s was expelled as a propaganda outlet.

The notion that Ms Golan could win seems far-fetched, but bookmakers rank her entry in the top ten. She is widely expected to advance to the finals on May 11th. Yet Irving Wolther, another of the surprisingly numerous academic experts on Eurovision, rates France’s chances most highly. It is competing with “Mon Amour” (my love), a slow ballad sung in French. That stands out from the other entries, mostly fast-paced, danceable songs in English. Nobody else does moody love songs quite like the French. As for polarising politics, “Mon Amour” has none of it.



A hurricane of protests

Although AUR’s leader, George Simion, calls Vladimir Putin and other Russian leaders “murderers”, many see the party as subtly pro-Russian. Its emphasis on national unity can be interpreted to mean it wants to annex parts of Ukraine that were Romanian until 1940. Mr Simion says it is impossible “to go back to 100 years ago”, but that “we want the rights of Romanians that live in Ukraine now to be respected.” He has long campaigned for union with Moldova, most of which was Romanian until 1940, and which now bans him as a security threat. Most Romanians see Russia as an oppressive imperial power, and a clearly pro-Russian splinter party hovers

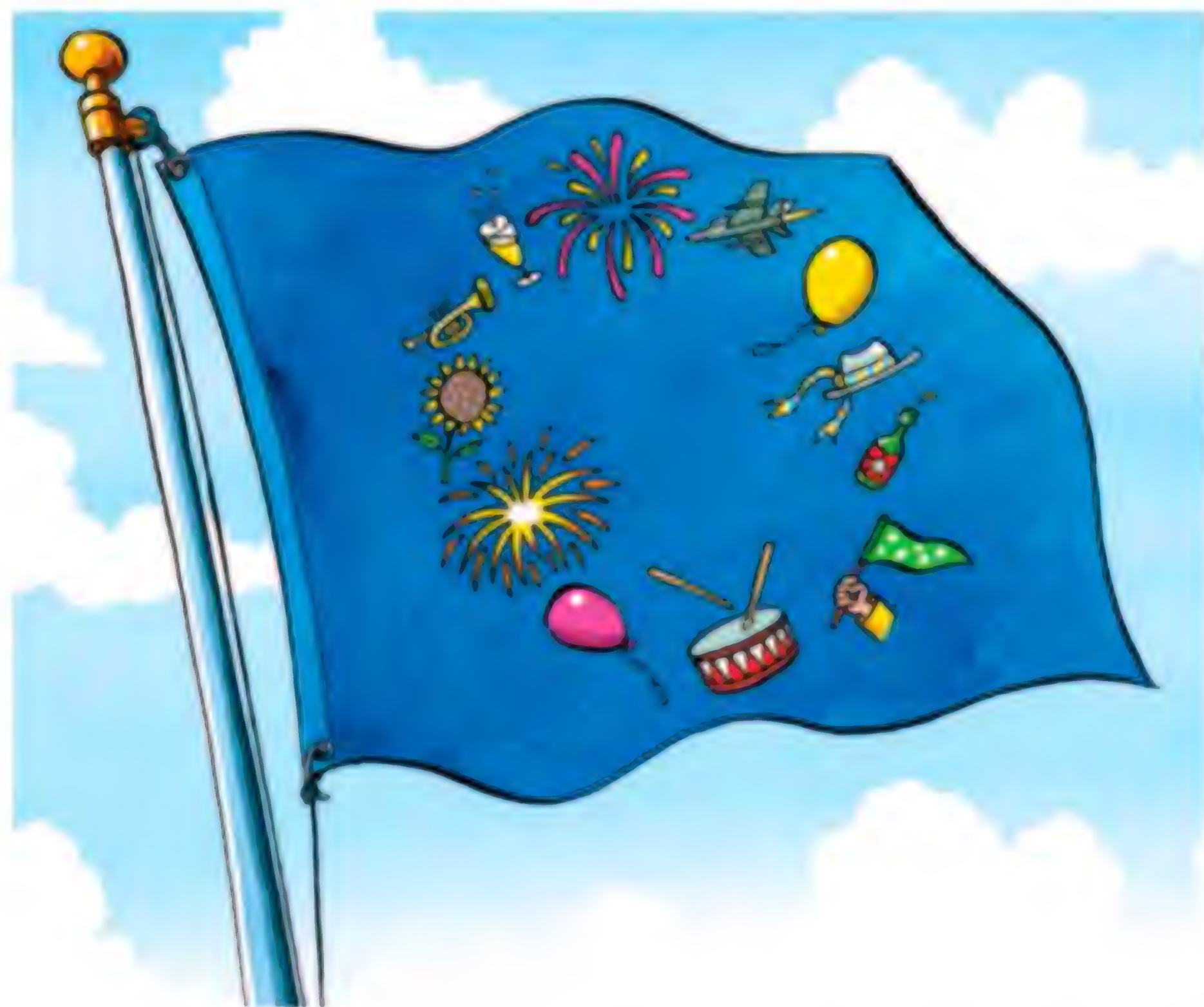
around 5% in the polls.

Mr Simion is now shifting away from his radical roots. Giorgia Meloni, Italy’s prime minister, has charted a similar course; he sees her as a model. Leaving the EU would be “a disaster”, he says, but “we don’t want a superstate.” He may be looking at the polls: a survey by Globsec, a think-tank, found that 71% of Romanians think the EU dictates policy to Romania, which has no power to influence it. Meanwhile, 38% of Romanians think far-right nationalism is a threat—about as many as think non-European migrants are. Tacking to the centre may win AUR more votes this year. They will have four chances. ■

CHARLEMAGNE

Celebration nations

National days offer a study into the psyches of Europeans



WANT TO GET anything done in Europe? Avoid May. The month kicks off with Workers' Day, which is celebrated by not working. The end of the second world war on the continent (May 8th) warrants another day off in some places. The Christian festivals of Orthodox Easter, Ascension and Pentecost result in yet more long weekends. All this time off can have a paradoxical effect. Reportedly, the French government had planned a big conference this week on promoting the four-day work week—but then realised Wednesday and Thursday were *jours fériés*, days off which most people supplement with a *pont* (bridge) on Friday. The confab was postponed. Only in Europe would it be a struggle to get people to attend a meeting on working less.

Another reason to spend time away from the office this past week was Europe Day on May 9th. The occasion is the anniversary of the plan put forward in 1950 to pool the continent's coal and steel industries which, several million meetings later, gave birth to today's European Union. Alas, the holiday is not for the public to enjoy, but only for the 60,000-plus employees of the bloc's institutions, most of them based in Brussels. Perhaps one day, a few million meetings hence, citizens from across a federalised union will mark the holiday together. For now the EU's 27 members (and a dozen neighbours not in the club) jealously guard "their" national days. The occasions they choose to celebrate—revolution in France, the death of a poet in Portugal, neutrality in Austria—and the manner in which the days are spent offer a glimpse into the psyches of the continent's citizens.

Many Europeans, like their American cousins on July 4th, commemorate shaking off the imperial yoke. Unlike Americans, some Europeans still share a continent with their former tormentors. Iceland and Norway both cheer evicting the Danes; Cypriots and Maltese observe the ousting of Brits. On October 28th Czechs proclaim the birth of Czechoslovakia in 1918—whereas for Slovaks *real* independence came when they agreed to an amicable split from the Czechs in 1993. The Balkans are torn between celebrating the dissolution of Yugoslavia three decades ago or their earlier emancipation from the Ottoman empire. From Finland to Georgia, Ukraine and the Baltics, most places that border Russia—and

were thus occupied by it at one point—observe their routing of Vladimir Putin's predecessors. In an odd twist, Spain remembers not the end of imperialism but its outset: its *Día de la Hispanidad* on October 12th marks the arrival of Christopher Columbus in the Americas in 1492 and thus the start of Spain's colonial era.

Monarchies such as Sweden and Luxembourg grant a day off to laud crowned heads past and present. The Dutch national day moves to each new monarch's birthday, though seemingly not if they are born in winter, when outdoor parties would be unpleasant. Liechtenstein celebrates the 20th-century prince who helped turn it from rural backwater to global tax haven. Other countries commemorate the adoptions of their constitutions. For a continent where failure is supposedly a cause of irremediable shame, plenty of not-quite-successful events are lauded. The Baltics memorialise not their escape from Soviet oppression in 1991, but their short-lived break for freedom from Russia in 1918. Hungary has three national holidays, two of which immortalise uprisings (in 1848 and 1956) that were subsequently crushed.

There is plenty of politics in picking what is officially memorialised. Italy's national day, on June 2nd, honours the establishment of its post-fascist republic in 1946. Giorgia Meloni, the hard-right prime minister whose party remembers fascism more fondly than others, instead prefers to celebrate to the date of Italy's unification. Belarus used to mark the end of the Soviet era—the exiled democratic opposition still does—but its retrograde dictator now prefers to cheer liberation from the Nazis. In an act of passive-aggressive solidarity, erstwhile West Germany's national day marked the occasion when East Germans—then a whole different country—had tried in 1953 to resist Soviet aggression. (Germany's new date, October 3rd, marks its reunification in 1990.) Portugal has eschewed political squabbles by celebrating the death of its foremost poet, Luís Vaz de Camões. Austria revels in its military neutrality by marking the constitution of 1955 that enshrined it.

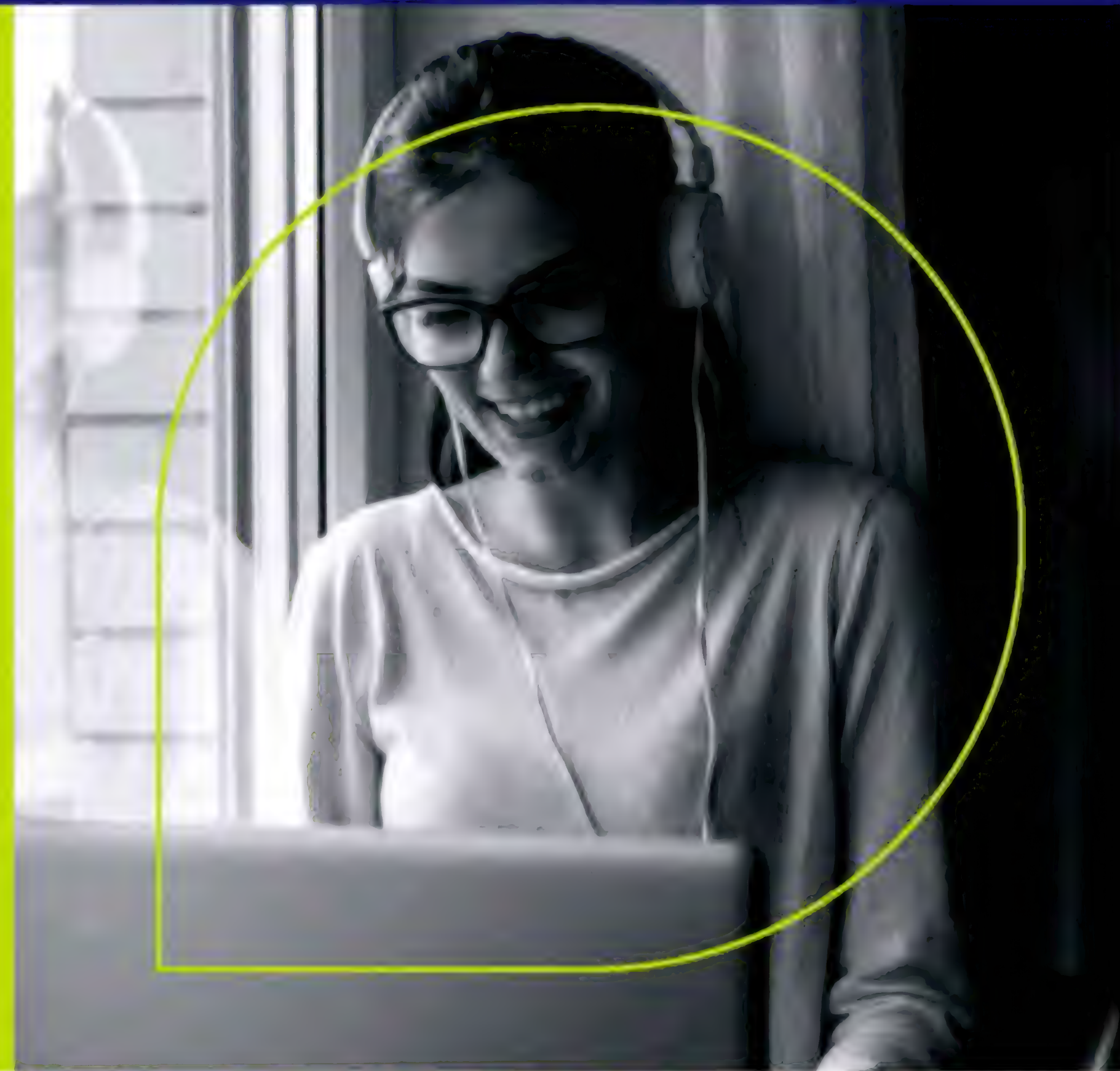
National days of our lives

Perhaps the most pompous festivities are on France's July 14th, when a monarchical president oversees celebrations of the revolution of 1789 with a grand military parade—as if to remind aspiring revolutionaries of what they would have to face down to overthrow the *nouveau régime*. (Ukraine, among others, once organised military processions too, but has suspended them for the time being.) Norway turns over its national day to children's parades, where schools march under hand-sewn banners. Adults, fittingly for a petro-rich state, start the day with a champagne brunch. Ireland uses its St Patrick's Day to rekindle its diaspora: ministers are dispatched to countries across the world to quaff a pint of Guinness, while their boss, the taoiseach, spends the day schmoozing America's president. The Dutch dress in orange from head to toe and suspend normal trading laws, allowing kids to put up stalls and flog their unwanted Christmas gifts.

What of Europe Day? In Brussels the EU opens its doors to the populace whose interests it somewhat distantly serves. At a weekend celebration in the run-up to the day itself, Charlemagne took his family on a tour of the bloc's institutions. There is much to celebrate in the simmering-down of a continent plagued by centuries of war—one of them still going—to meeting rooms where besuited officials hash out their disagreements. If any fighting could be spotted, it was between national diplomats competing to see who could give out the most sweets to visiting children. ■

With personalised AI, a new era of workplace communication is here

How generative AI can unlock business impact, without compromising our humanity



Constant dings on Slack. An email inbox growing by the minute. Calendar invites rapidly filling the day. No matter where you look, the overwhelming volume of communication is inescapable.

Miscommunication already costs US businesses a staggering \$1.2trn each year in lost productivity. And over the past year, most leaders and workers report communicating more—and through more channels—than ever, according to a 2024 Grammarly-Harris Poll report. Amid the overload, companies desperately need a way to cut through the noise.

The onset of generative artificial intelligence (AI) has added another layer to the equation. Generative AI could save up to \$1.6trn annually in US productivity if all workers were using it for communication. But that's only if it's

implemented thoughtfully. Conversely, it has the potential to create and spread so much low-quality content that it worsens our overload problem—and threatens our creativity and originality.

"Here's this magic tool that's going to reduce the cost of content creation down to zero, which means there's going to be a lot more content," says Rahul Roy-Chowdhury, CEO at Grammarly, an AI-powered writing assistant used by 30m people and 70,000 professional teams. "But is that good? We want to make sure that these tools get deployed in a way that augments human capability and potential."

The average worker spends over 19 hours a week on writing tasks alone. Generative AI technology can help ease this burden, but AI-generated communication too often reads as stale, generic and impersonal.

Amid concerns about losing the human touch, Grammarly has set its sights on using AI to enhance communication, rather than overpower or replace it. Its generative AI technology not only understands personal and brand voice and tone, but also accounts for a user's situation, goals and intended audience to provide highly relevant, personalised assistance.

"I like to use humour—I'm kind of notorious for sharing dad jokes," says Mr Roy-Chowdhury. "So Grammarly will know that and recognise that I have this lighter tone when I'm communicating with the company, but that it may not be as relevant

if I'm communicating with the board of directors."

Grammarly works across all of a user's apps and tools to help ensure all communication is precise, clear and within context. With this personalised approach to AI, people and brands can enhance their unique voice—not detract from it. That ultimately saves them time to spend on work that matters most.

Companies such as ModMed are reaping the rewards. Using Grammarly saves the specialised healthcare software provider over 19 working days per employee per year in productivity. Employees use the generative AI features to help with everything from brainstorming to polishing emails to producing the first drafts of content.

"Once we saw what it could do," ModMed Co-CEO Dan Cane says, "that was a game-changer across the organisation."

This is the path to real AI return on investment: communication in context. Better—rather than more. Tools that enhance—not replace.

As Mr Roy-Chowdhury says, "AI can help you write as well as you think, not think for you." ■

Learn more at
grammarly.com/enterprise.



**Businesses
using Grammarly
report saving
an average of 19
working days per
employee per year
in productivity.**

Britain



The economy

The grand bargain

The opportunities and risks of a Labour government for business

EARLIER THIS year the Labour Party hosted business leaders for a day of hobnobbing at the Oval cricket ground in London. A representative from Skanska, a construction company, challenged Jonathan Reynolds, the party's shadow business secretary. Problems with big infrastructure projects had dented Britain's attractiveness, she said. What could she tell her board in Sweden to make them re-evaluate? Mr Reynolds's reply: he would go to Stockholm himself to make the pitch.

That moment captured the Labour Party's striking courtship of business under the leadership of Sir Keir Starmer. Between them, Sir Keir, Mr Reynolds and Rachel Reeves, the shadow chancellor, have now met almost all the FTSE 350, Britain's largest listed firms, in a cycle of breakfasts that the party has dubbed the "smoked salmon offensive" (a nod to the "prawn cocktail offensive" that saw Sir Tony Blair court the City before taking power in 1997).

For most firms, the objective behind the glad-handing is simple. A set of dire local-election results for the Tories on May 2nd confirmed that Labour is extremely likely to form the next government. "It's better to engage early to influence policy," says one FTSE 100 chief executive. As for Labour's motives, Sir Keir identified fixing its relationship with business as one of three "proof points"—along with support for NATO and confronting antisemitism—by which voters would judge whether the par-

ty had changed from the tenure of Jeremy Corbyn, his leftist predecessor.

That strategy has worked better than many could have imagined. The Labour Party is now regarded as better for business than the Conservatives by a margin of 46% to 32%, according to a recent poll of 1,005 executives by Savanta. "It is beyond decontamination," says one senior Labour figure. "The political risk is now with the Tories. That is an extraordinary thing to be able to say in one political cycle."

Yet many executives interviewed by *The Economist* still have worries. "When you engage with them, it's all great and helpful, but you have this constant nagging feeling that you aren't entirely sure where Keir and Rachel are on free markets and the role of the state," says one. Angela Rayner, the deputy leader in charge of Labour's proposed employment reforms, excites particular suspicion (see next story). "It's been a remarkably good PR job," says one FTSE 100 boss. "The question is: is it real? Who are we really dealing with?"

The answer to that question is not entirely knowable until and unless Labour gets into power, not least because some policy details have yet to be worked out. But it is clear that the party is not seeking to rehash Sir Tony's approach. In a big speech in March Ms Reeves set out a clear break from both Thatcherism and the New

→ ALSO IN THIS SECTION

47 A profile of Angela Rayner

48 Bagehot: Goodbye, 2019!

→ Read more at: [Economist.com/Britain](https://www.economist.com/Britain)

— Are the Greens breaking through?

— Wayve's record raise

► Labour era. Although the Blair administration saw rapid increases in incomes, she said, the embrace of globalisation and new technologies could widen inequality, see regions pull apart and produce insecure work. "Too many CEOs treat Starmer's Labour Party as though it was a Tony Blair tribute act or a Jeremy Corbyn burial society," says Jim Murphy, a former cabinet minister under Sir Tony and now head of Arden Strategies, a consultancy. "It's neither of those things: the party has now been shaped by a different generation."

It makes more sense to think of Labour's approach in more businesslike terms. What Sir Keir proposes is a grand bargain. To spur private investment, the party promises competence, consultation and reform. In return firms can expect tighter labour-market rules and more interventionism. It is a compact, Sir Keir told the February shindig, that will come with "new expectations on your business...We all have to change—business included."

Labour's offer to business has three broad elements. The first is political stability. The party says it will fix corporation tax at its current level of 25% for the parliament; retain investment allowances introduced by Jeremy Hunt, the current chancellor; and cut back budget statements to one per year. The Office for Budget Responsibility, a reassuringly independent fiscal watchdog, will be given greater powers to review the Treasury's homework.

The second element is access and influence. Sir Keir talks of "sleeves rolled up" co-operation with businesses to zap obstacles to growth; it will not be "every quarter with coffee and croissants and everyone says the same thing as they said three months ago", he told investors recently.

The third element is a programme of supply-side reforms, most notably ungumming Britain's planning regime. Planning reform will be the "very centre of our economic and our political argument", said Ms Reeves recently. Although questions remain about how radical it will really be, party leaders boast that its electoral coalition, which is younger and more urban than the Tories', will liberate it. "We don't have the same NIMBY culture," says one. Labour supporters are also more positive about the EU, which bodes well for a more constructive relationship with Brussels.

Many executives say that a new government with a large majority and a dose of planning reform would see the case for investing in Britain revised. "They don't need to set the world alight," says one FTSE 100 executive. "They simply need to calm the horses." One private-equity figure, just back from seeing investors in New York and Singapore, echoes that. "I was struck by how much they needed reassurance that Brexit was settling down and also that there's no more experimentation coming.

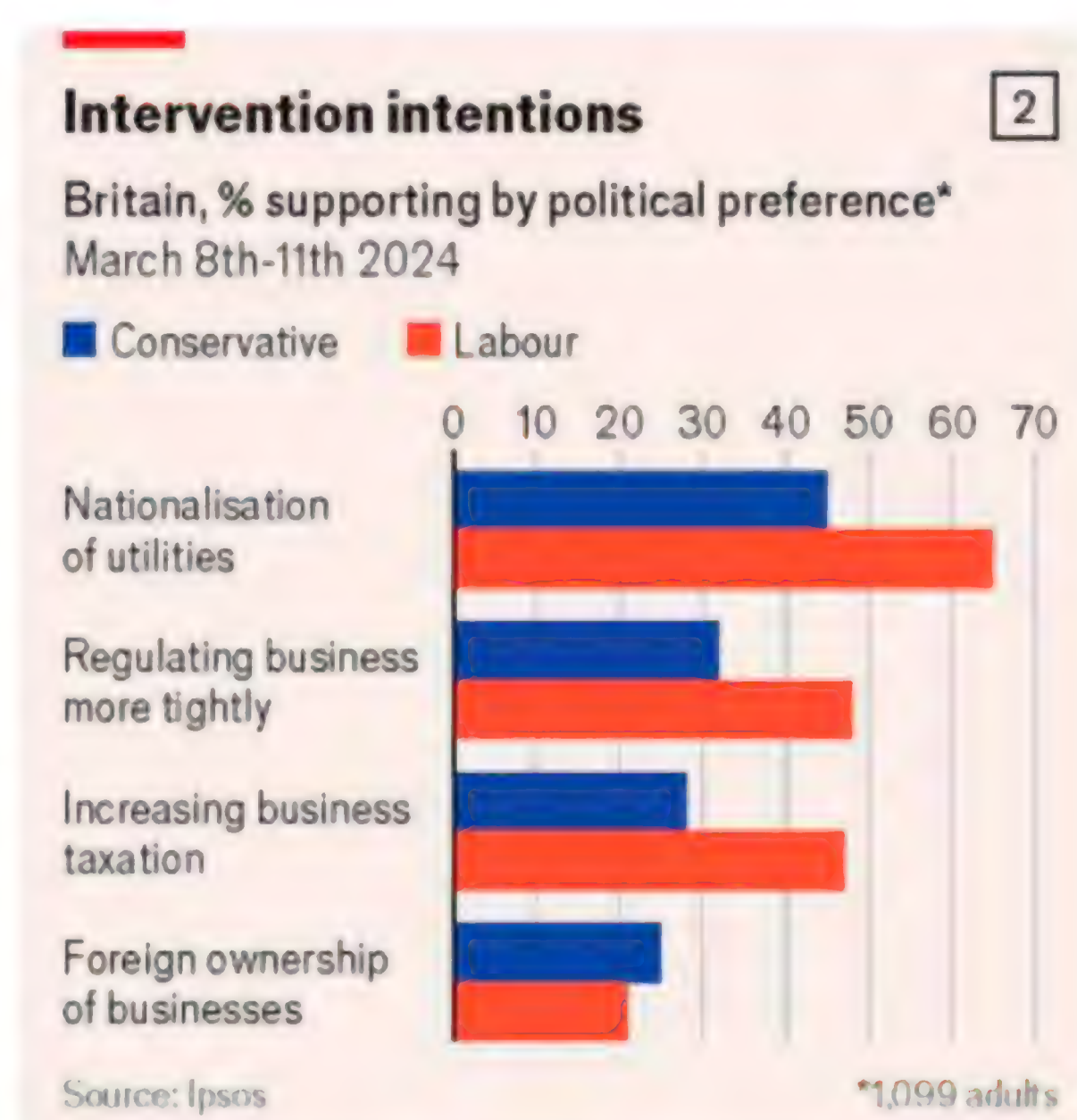


The Truss tornado had a big impact."

What does Labour want in return? Most obviously, labour-market reform. Britain has one of the most liberalised job markets in the rich world, according to the OECD, a club of rich countries. Sir Keir argues that this model is precarious for low-income workers and reinforces low productivity growth by discouraging investment in plant and training.

Less than a quarter of British workers are unionised. The party wants to make it easier for trade unions to organise workers and to initiate industrial action. The result, says Alan Bogg, a labour-law expert at the University of Bristol, would be to reset the clock to around the time of Sir Tony's reforms of 1998, which supported the right of workers to join a union if they wished, rather than the closed shops of the 1970s.

More radical, says Mr Bogg, are plans to tighten up individual workers' rights. A long list of measures includes getting enhanced rights over dismissal and sick pay from their first day in work (currently it is a two-year wait to accrue them—the longest such trial period in the OECD, at least where they exist). In an attempt to regularise zero-hour contracts, under which a worker has no guaranteed hours each week, staff would have a right to regular hours after 12 weeks' employment. The le-



gal categories of employees, workers and the self-employed would be reviewed.

Ms Reeves plans to change the mandate of the Low Pay Commission, which advises on the statutory minimum wage, to account for the cost of living. Since 2000 the minimum wage has gone from 40% to 61% of median earnings, catching up with France (see chart 1). This has seemed like a free lunch for policymakers: more money for voters with few consequences for unemployment. Yet go much further and hard trade-offs will emerge, say Nye Cominetti and Hannah Slaughter of the Resolution Foundation, a think-tank.

Hospitality and retail bosses worry, for example, that all this will hurt businesses characterised by thin margins and seasonal demand. "We have a mixture of hope, cynicism and fear," says one supermarket executive of Labour's plans. "We don't have the money down the back of the sofa." Some law firms have warned clients that by granting workers more extensive day-one rights, they will need to be more cautious about hiring them in the first place and to run tighter performance-management processes to avoid unfair-dismissal claims.

Senior party figures stress they will consult with firms. Some plans have already been diluted. At one stage, for example, the party had talked of rolling out collective bargaining across the economy; now that is limited to social care. The initial plan to give workers protections on day one, insiders stress, does not stop businesses from using probation periods or dismissing workers for legitimate reasons.

But the tussle over workers' rights is a reminder that Labour politicians and voters are interventionist by instinct. Polling of the party's current 204 MPs by Ipsos on behalf of Apella, a consultancy, shows they are much more likely than their Tory colleagues to think business is under- rather than over-regulated. Gambling, oil and gas, and social media are viewed with particular disfavour. An analysis by Apella of the backgrounds of Labour candidates in 100 winnable constituencies finds that two-thirds of them have worked most recently in the public or non-profit sectors.

Labour voters are 16 percentage points more likely than Tory voters to say that the government should set stricter rules on businesses in areas such as workers' rights, Ipsos found, and 19 points more likely to say business taxation should rise to fund public services (see chart 2). They place more emphasis on environmental responsibility, tax compliance and human rights.

Labour's plan is not laissez-faire, then, but better seen as a programme of state-led industrial policy. It is working out the detail of a £7.3bn (\$9.2bn; 0.3% of GDP) "national wealth fund", intended to spur private investment in green industries. It plans to nationalise rail operators as their

► franchises expire and to create a state-run energy operator. Ms Reeves is thought to want to shake up the audit market.

An instinct to intervene gives rise to several worries. One is whether Labour will have a tendency, also visible under the Tories, to pick out corporate villains. "At what point do they say 'We like business but not you, and not you, and not you?'" says one lobbyist. Another is whether the party might try to press firms on pricing. The current government has succumbed to that temptation, too, but Labour voters are 12 percentage points more likely than Tories to think "business making excessive profits" was a cause of inflation.

Labour and business

Rayner of terror

Labour's deputy leader is entertaining but, to some, alarming

BOLSHIE. GOBBY. Blunt. Feisty. Mouthy. Scumbag. Angela Rayner, the deputy leader of the Labour Party, has been called a lot of things, not all of which are nice. She has even—and here perhaps a trigger warning is required—been called "ginger". She can give as good as she gets: she once called some Tories "scum"; she recently described Rishi Sunak, the prime minister, as a "pint-sized loser".

That Ms Rayner receives such attention is a victory. Most of the Labour shadow cabinet remain just that: shadowy. Ms Rayner, by contrast, stands out: literally (she is tall), visually (she has unarguably red hair) and verbally. Whereas Sir Keir Starmer, the Labour leader, utters phrases like "economic growth is the absolute foundational stone for everything", Ms Rayner tends to say things like "I had my boob job on my 30th birthday" because "my boobs just looked like two boiled eggs in socks". She causes conniptions.

If what she says flusters some, what she has not yet said flusters others. Her political future is not assured. The question of how much capital-gains tax she should have paid on the sale of a council house in Stockport looks increasingly serious; a police investigation has begun, and Ms Rayner says she will step down if it finds she has committed an offence. But if she is cleared, her probable next job will be deputy prime minister in a Labour government. And although a great deal is known about her personally, from her first proper job (as a carer) to that boob job (paid for with a £5,600, or \$7,030, loan), how she would approach this role is much less clear.

She has said that she will be "John Pres-

cott in a skirt", a reference to the plain-spoken deputy prime minister to Sir Tony Blair; her remit includes the party's sweeping plans to bolster workers' rights. But politically she feels elusive. There are complaints that she has been absent from the "smoked-salmon offensive" at which Labour has buttered up businesses over breakfast ("Is she locked in a cupboard?" asks one FTSE 100 boss). Her ideological leanings are hard to pin down.

Ms Rayner is clearly left-wing. But how left? Is she Corbynist or Starmerist? Marxist or—southerners often confuse the two—merely northern? She is "more centre-left, soft-left," says Peter Mandelson, a Labour grandee. "She's not hard-left."

Tax lurks in the background. The party's plans include a promise to end non-domiciled tax status, to close a tax loophole for private-equity types and to levy value-added tax on private schools (it will not reimpose a cap on bankers' bonuses). Executives worry that this is a foretaste of a wider squeeze if growth does not pick up quickly. "It's a courting exercise at the moment. Everyone's getting along just fine," says another FTSE 100 boss. "But once you're in Downing Street, you've got important decisions and you have to prioritise some things over others." The outlines of Labour's grand bargain with business are clear. The true test is to come. ■

Others imply that she lacks an ideology; the word "ambitious" recurs. Michael Ashcroft, a Tory peer and author of a critical unauthorised biography of her, goes further: some colleagues, he says, call her a "political opportunist". So neither Marxist nor Corbynist, but Angela Raynerist.

She has cause to be happy in her own skin: her life is impressive. She grew up in Stockport, a town in Greater Manchester that Friedrich Engels—sounding rather less united with the workers of the world than usual—called "excessively repellent". Home offered concrete floors, cold water and an illiterate mother. Other politicians are affluent enough not to know the cost of a pint of milk. Dairy was at times a luxury for Ms Rayner: her mother once gave them "shaving foam...as cream" because she couldn't read the label. By the time Ms Rayner sat her GCSEs she was pregnant.

Her childhood was, in short, personally unenviable and politically invaluable. She once said that she has been treated as a "trinket". Certainly to Labour, Ms Rayner is more than merely "Ange"; she is proof that the party that claims to be "not just of working people but for working people" still is that. She attracts the adjective "real", as if the middle classes were mere mythology (which Labour, embarrassed by how bourgeois it has become, sometimes seems to wish they were).

Her political rise was rapid: a spell as a trade-union representative led to her becoming an MP in 2015, and a position on the Labour front benches just over a year later. Watch her speak, or read interviews with her, and it is easy to see why. She is charismatic and clever. Where other politicians fudge and waffle she talks about how she ate chips with chips as a child and became "a grandma at 37!" Interviewers often transcribe her speech with exclamation marks! Which can give it an alarming feel! It is a notable change from Sir Keir; he is clearly more a semicolon sort of man.

There are criticisms. She likes to play to a crowd—and British politics has enough crowd-pleasers. Some argue that the grim-up-north-ernness is overdone. Or, as one left-wing commentator put it: "Stuff your back story." But the criticism has its own critics. Many detect misogyny in the terms, good and bad, that people use about her. Words such as "feisty" (broadly speaking used to mean "a woman who speaks"); "gobby" (a northern woman who does); and "trinket" (an attractive one who ditto) are not unloaded; "ambitious" is a notorious misogynist mantrap.

The more worrying criticism is that she is politically opaque; though to win the next election, it seems that all Labour needs to do is to continue not being the Tories and not saying anything egregious. Ms Rayner once said: "I don't know when to shut up." Arguably, it seems, she does. ■



BAGEHOT

Goodbye, 2019!

The Conservatives' world has disappeared. Don't tell Rishi



IN “GOOD BYE, LENIN!”, a cult German film, a devoutly communist mother suffers a heart attack in the autumn of 1989 and ends up in a coma. By the time she wakes up the Berlin Wall has fallen, Germany is on the path to reunification and communism has crumbled. A poignant farce ensues, in which her son Alexander shields his ailing mother from capitalist reality, recording fake-news bulletins showing Berliners rushing east, not west. In her bedroom the Deutsche Demokratische Republik (DDR) carries on; outside it, free Germans buy Billy bookcases from IKEA, drive Volkswagens and drink Coca-Cola.

Such near-heroic denial of circumstances is now in vogue in British politics. On May 3rd Rishi Sunak took a victory lap in Teesside, which was the Conservative Party’s only victory out of 11 mayoral races in local elections. “I’ve got a message for the Labour Party,” said the Tory prime minister, currently trailing Labour by 20 points in national polls. “They know that they have to win here in order to win a general election.” In fact the Conservatives suffered a swing against them which would guarantee they lose all their seats in a region that is a vital chunk of the “red wall”—a band of traditionally Labour constituencies that the party is so proud of winning in the 2019 general election.

Back then a cottage industry of politicians, writers and party loyalists declared that a permanent realignment of British politics had taken place. Instead, areas that swung to the Tories for the first time in 2019, such as Teesside, will be among the first to swing back to Labour; in 2024 de-realignment is the order of the day. A world that was supposed to be a new political settlement has ended remarkably quickly. Those who believed in it are at risk of bewilderment, rather as if they had just woken from a coma.

“Good Bye, Lenin!” shows that uncomfortable reality can be kept at bay for a long time with enough will. Conservative strategists have insisted for almost two years now that Labour’s 20-something percentage-point poll lead is soft. This is justified in peculiar ways. The most curious is the idea that people do not especially like Labour and simply hate the Conservatives. This is accurate enough, but it’s odd for the Tories to present it as a positive. It has the misplaced swagger of an ex-husband greeting his ex-

wife’s new boyfriend: “Think you’ll find she hates me a lot more than she likes you!”

Tories also like to draw comforting comparisons with 1997, when Labour won a gigantic majority. They contrast the popularity of Sir Tony Blair, who was elected in a landslide that year, with that of Sir Keir Starmer, the current Labour leader. Could Sir Keir draw a crowd of flag-waving patriots to Downing Street? Given that the crowd back then was largely made up of Labour activists who had been bused in from across the country, yes, he probably could. The scenes outside Downing Street were as artificial as anything the DDR could muster.

A cartoonish vision of Sir Keir still dominates Conservative attack lines, which paint him as an idealistic leftie lawyer. The critique might have rung true once. In 2020 Sir Keir described Jeremy Corbyn, his left-wing predecessor, as “a friend as well as a colleague”; he took the knee after the murder of George Floyd. Now, however, it misses the mark. Sir Keir hoofed his “friend” Mr Corbyn from the party. The most left-wing parts of his manifesto have been stripped out. Arguments that voters will abandon Labour due to a non-existent extremism resemble one of Alexander’s doctored news reports, which showed people streaming into East Germany due to “unemployment, bad future prospects and the increasing election victories of the neo-Nazi republicans”.

A pliant media and party apparatchiks combine to keep the illusion going. One analysis of the local elections suggested that Labour would have won 35% of the vote if the contests on May 2nd had happened nationally. Mr Sunak and his loyal lieutenants leapt on the figure, claiming that Labour was on track for a hung parliament rather than a stonking majority. Newspapers splashed on Mr Sunak’s comments, ignoring the fact that voters behave differently in national polls compared with local ones. If the prime minister says it, it must be true—just as Alexander persuaded his mother that Coca-Cola, advertised outside her window, had been invented by an East German laboratory in the 1950s.

Power has already evaporated from the government but it grinds on, pretending it has a purpose. Civil servants cobble together scraps of policy, just as Alexander rooted through bins to find old jars of Spreewald pickles, a DDR delicacy, to convince his ageing mother. After six years of dithering, the government will press on with a ban on wet wipes. Another proposal will, in the government’s words, “halt the march of gender-neutral toilets”.

Red wall, blue wall, Berlin Wall

“Good Bye, Lenin!” showed how each East Berliner coped with the end of the world in their own way. Some turned to drink, mourning what was gone. Others embraced the wonders of capitalism by taking a job at Burger King. In the same way, some Tories insist all is not lost while others tour television studios to explain that the party is doomed. Others still are publicly throwing their lot in with Labour. Natalie Elphicke, the Conservative MP for Dover, defected to the opposition on May 8th, the second to do so in a matter of weeks; an ex-Tory minister introduced Rachel Reeves, the shadow chancellor, at a speech on May 7th.

In their hearts, most Conservatives know it is over. There will be no repeat of the last election, when an unpopular Labour Party, led by a rabid left-winger, fell to a heavy defeat. The realignment of 2019 was a mirage. “Good Bye, Lenin!” was advertised with the slogan: “In 79 square metres, East Germany lives on.” Only in Downing Street do dreams of 2019 never die. ■

International



International law and disorder

The world's rules-based order is cracking

WASHINGTON, DC

Human-rights lawyers are battling to save the laws that were designed to tame rulers' most violent impulses

RARELY HAVE international courts been busier. In The Hague, the International Criminal Court (ICC) is considering war-crimes prosecutions against Israeli leaders, including Binyamin Netanyahu, the prime minister, over the conflict in Gaza. It has already issued an arrest warrant for Vladimir Putin, Russia's president, for war crimes in Ukraine. The International Court of Justice (ICJ), also in The Hague, is weighing genocide charges against Israel. In Strasbourg the European Court of Human Rights will hear a request in June for Russia to pay compensation to Ukraine.

And yet, for all the legal action, rarely have activists seemed gloomier about holding rulers to account for heinous acts. "We are at the gates of hell," says Agnès Callamard, head of Amnesty International. Countries are destroying international law, built over more than seven decades, in service of "the higher god of military necessity, or geostrategic domination".

For a time after the cold war the world seemed to move towards an international

rules-based order with less conflict, more democracy and open trade. Lawyers looked forward to "universal jurisdiction"—a borderless fight against impunity. Some leaders, such as Slobodan Milosevic of Yugoslavia and Charles Taylor of Liberia, even stood trial for atrocities.

But the order, always imperfect, is breaking up because of intensifying geopolitical rivalries—and efforts to uphold it may only expose its weaknesses. Russia blatantly violated the UN Charter by invading Ukraine. China supports Russia abroad, represses minorities at home and bullies neighbours. America, the chief architect of the system, undermined it with the excesses of its "war on terror", not least after the invasion of Iraq in 2003. Now critics accuse it of being complicit in atrocities by supporting Israel's war on terror. Israeli forces have killed tens of thousands of Palestinians in an attempt to destroy Hamas, which killed or kidnapped some 1,400 Israelis on October 7th.

China and Russia mock the "rules-

based international order", a phrase intoned by President Joe Biden, as a cloak for American dominance. The fuzzy term is similar in meaning to "liberal international order" (a more common phrase that can confuse Americans, for whom "liberal" means left-wing). For Mr Biden it is the antonym of a world governed by brute force. Antony Blinken, his secretary of state, says it is the broad system "of laws, agreements, principles and institutions" to manage relations between states, prevent conflict and uphold human rights. Critics reckon America avoids referring to "international law" so as to preserve its freedom to use force.

Theorists have long debated whether international order is best preserved by a balance of power—such as the "concert of nations" that followed the Napoleonic wars in Europe—or by laws and institutions of the kind America has repeatedly tried to build since the end of the first world war. For Matthew Kroenig of the Atlantic Council, an American think-tank, a liberal global order requires both of these. International rules create stability and prosperity; American power, channelled through its alliances, acts as enforcer in an otherwise anarchic world.

International law has long recognised states' sovereign immunity, which protects them from legal action in foreign courts. But their use of violence at home or abroad is circumscribed. The UN Charter of 1945



forbids the use of force in international disputes except in self-defence. The Universal Declaration of Human Rights of 1948 enshrines individual rights to life, liberty and the security of the person. The Geneva Conventions of 1949 regulate war and protect non-combatants. Further conventions ban genocide, torture and more.

International courts punish breaches. But there is no global policeman to enforce their rulings. Worse, the UN Security Council, the pinnacle of the system—which can authorise force to maintain peace and security—is all but paralysed by the power of veto held by its five permanent members (see chart). Coups abound and UN peacekeepers are being ejected from several countries. The consensus to curb nuclear proliferation is eroding, too. In March Russia vetoed a resolution to extend the work of experts who monitor UN sanctions against North Korea's nuclear-weapons programme—a reward for North Korean supplies of weapons to Russia.

Richard Gowan of the International Crisis Group, a think-tank in Brussels, notes that the Security Council can reach tenuous agreement on some crises, for example in Somalia and Haiti. “And it can still agree on sending humanitarian aid, as an alibi for inaction,” he says. But geopolitical rivalry is creating intense battles over who should run the alphabet-soup of UN bodies. Though Russian candidates don't get far these days, China courts UN members assiduously. It tries to nudge the UN away from protecting individual rights and towards upholding the primacy of states.

America increasingly aims to preserve the liberal order through military alliances in Europe and Asia. It regards the G7 as the “steering committee” of the world's advanced democracies. Some foresee a dual order: a liberal one dominated by America and an illiberal one centred on China.

Even so, human-rights lawyers are trying to preserve the idea of universal rules, and are working through international courts given the UN's impotence. The system has many gaps, in jurisdiction and enforcement. It is “a broken-down car that somehow keeps moving”, says Harold Koh of Yale University. The ICJ, akin to a civil court, mostly weighs disputes between states, but has jurisdiction over the Genocide Convention. In 2019 it agreed that any party to the convention could bring a genocide case, though it must prove intent to “destroy, in whole or in part, a national, ethnic, racial or religious group”.

The ICC, more like a criminal court, investigates people rather than states. But it can prosecute a broader range of offences—not only genocide but also crimes against humanity and war crimes. Independent prosecutors decide whether to issue arrest warrants, but rely on states to enact them. They can charge anyone in-

volved in crimes committed on the territory of countries that have ratified the ICC's statute, or by their citizens. The ICC can investigate a fourth crime, of “aggression”—regarded as the “supreme international crime” that leads to other atrocities—but only if suspects are citizens of state parties. The ICC's work is thus limited because dozens of countries have declined to join the court—among them America, Russia, China, India and Israel.

Throw the book at them

The law is moving nevertheless. Start with responses to the war in Ukraine. The ICC has issued arrest warrants for four Russians, among them Mr Putin, who is wanted on charges related to the deportation of Ukrainian children. In the ICJ, meanwhile, Ukraine has accused Russia of abusing the Genocide Convention by justifying its invasion with the claim that it was acting to halt a Ukrainian “genocide” of Russian-speakers. The ICJ vainly ordered Russia to halt its invasion but ultimately ruled Ukraine's claim inadmissible. Instead the court will hold hearings on whether Ukraine, rather than Russia, committed genocide. That may seem perverse, but could help debunk Russian propaganda.

Four Ukraine-related cases against Russia are pending at the European Court of Human Rights (ECHR), an organ of the Council of Europe (distinct from the European Union). They include a claim for compensation that may run to tens if not hundreds of billions of euros. The council has set up a register to which Ukrainians can submit claims.

Russia was expelled from the council in March 2022, but the ECHR retained jurisdiction for events that took place in Russian-controlled occupied lands until the end of the notice period in September 2022. Ukraine will urge the court to consider subsequent events. But its expected push to include damage caused by Russia in the rest of Ukraine may discomfit some European allies that also fight abroad. A favourable decision on damages could fur-

ther spur moves in Western countries to seize some of almost \$300bn of frozen Russia assets. Enforcing the finding of an international tribunal constitutes solid grounds for confiscating sovereign assets, argues Oona Hathaway, also at Yale.

In the case of Gaza the ICJ admitted South Africa's genocide case against Israel as “plausible” in January. Pending full hearings, it told Israel to ensure its soldiers do not commit acts of genocide and to allow more humanitarian aid to Gaza, but did not order an immediate ceasefire. As for the ICC, its chief prosecutor, Karim Khan, is reportedly about to issue warrants for the arrest of Israeli political and military leaders (and possibly Hamas figures, too) on charges still undisclosed. Mr Netanyahu denounced the prospect as an “outrage of historic proportions”.

A finding of genocide would be grievous to Israel, a country born from the ashes of the Holocaust. Israel is said to be threatening retaliation against the Palestinian Authority (which, in effect, granted the court jurisdiction in Gaza). Israel's supporters in Congress call for sanctions against the ICC. Mr Khan, in turn, has demanded an end to “all attempts to impede, intimidate or improperly influence officials”.

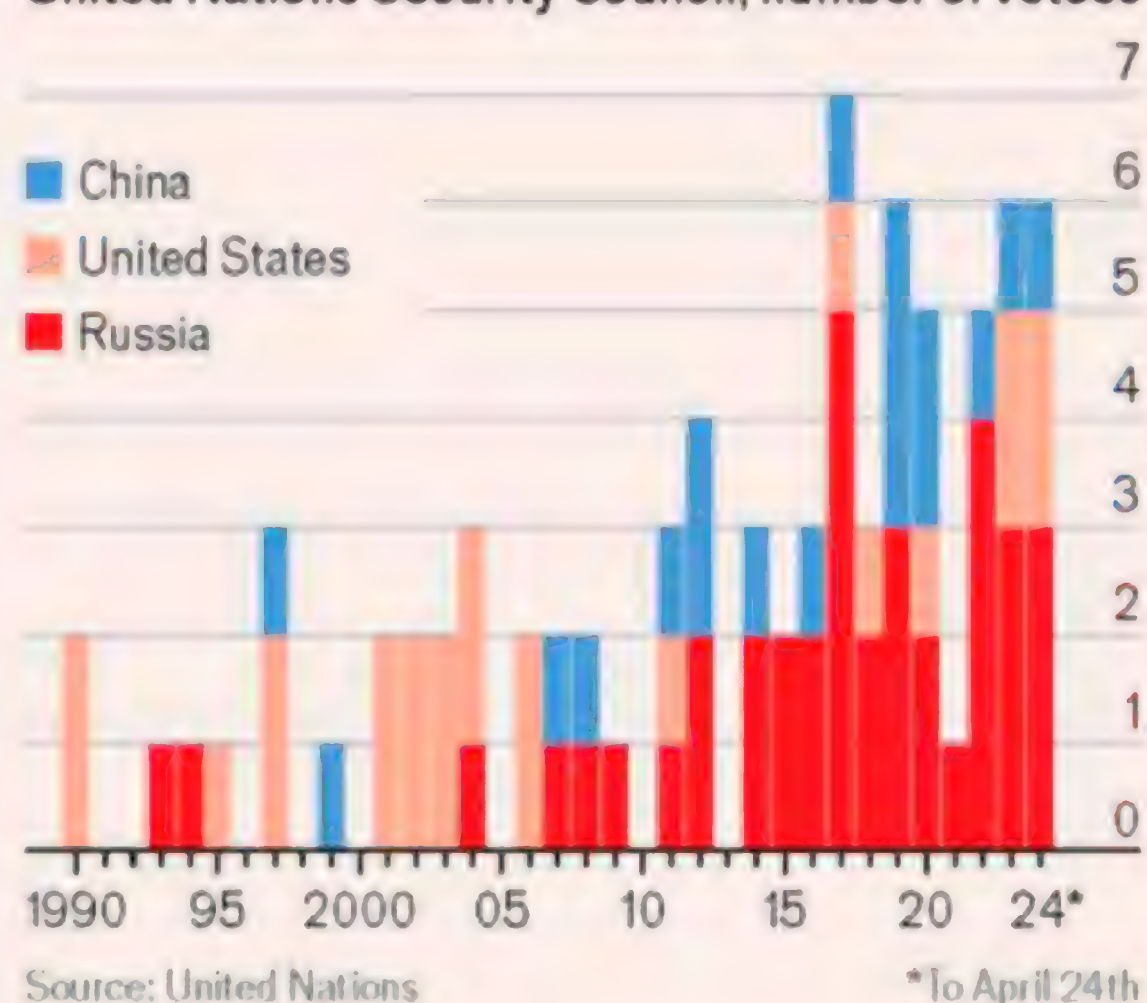
All of which is a quandary for the Biden administration. America is not a signatory but has supported the ICC in Ukraine. Yet it says the court lacks jurisdiction in Gaza. America urges Israel to do more to protect Palestinian civilians, but has for months supplied it with weapons. On May 8th America confirmed it had suspended a shipment of heavy munitions out of concern that they might be used in Rafah, where more than 1m Palestinians are sheltering. Despite an international outcry, Israel is starting to push into that city. Talks about a ceasefire continue.

Human-rights lawyers hope to close some gaps in international law, whether by new agreements (some call for a special tribunal to prosecute Russia for aggression) or by existing courts extending their remit. They also want new curbs on AI and autonomous weapons. But they cannot hold back states bent on violence. Arrest warrants limit leaders' international travel. But don't expect to see Mr Putin in the dock.

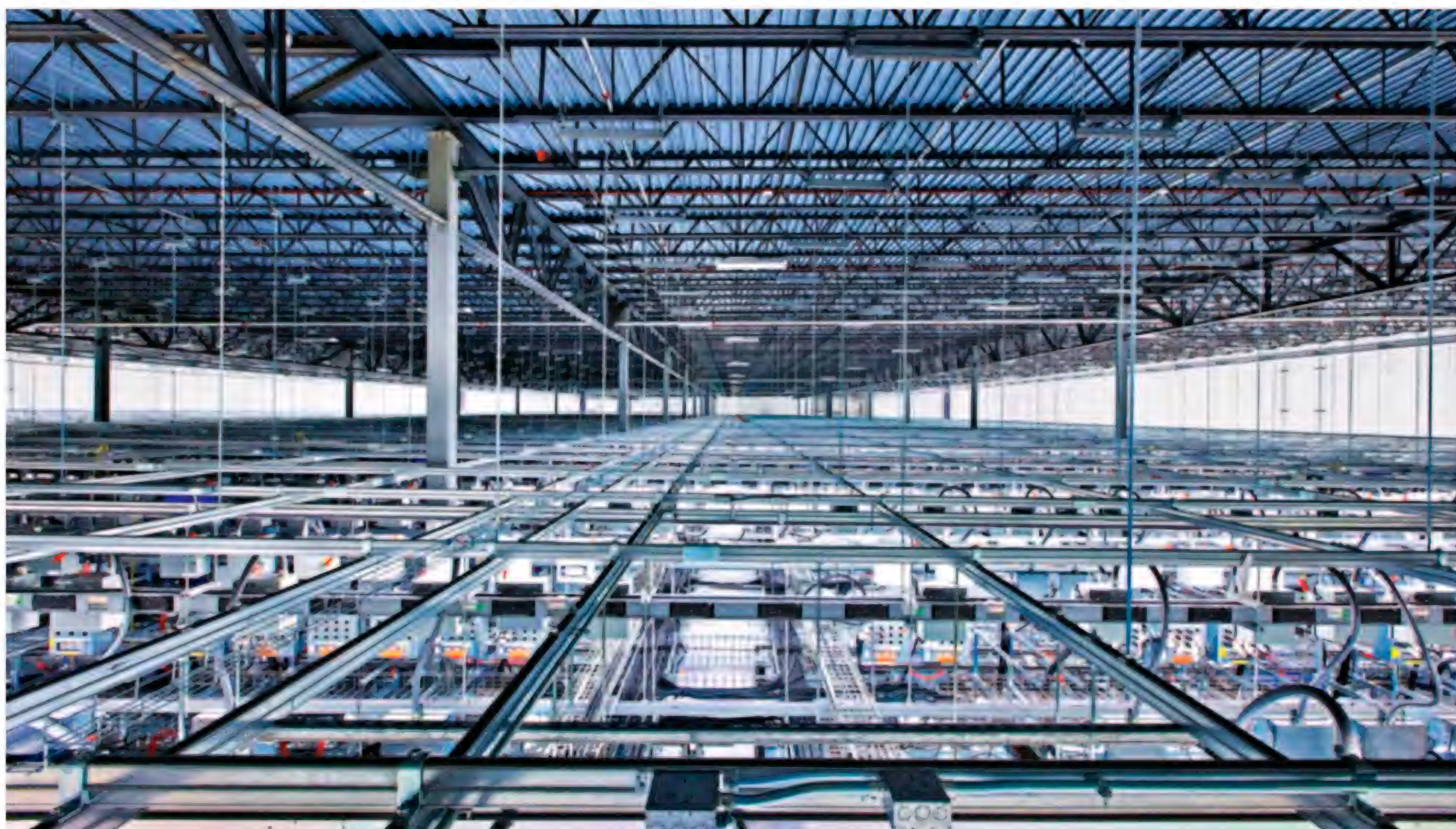
So what is the point of the court battles? Lawyers offer three answers: to impose a reputational and perhaps economic cost on those who spill blood wantonly; to strengthen the negotiating hand of their victims in future diplomatic talks; and, at a minimum, to establish a credible historical record of atrocities. Confronted with an “epidemic of inhumanity”, Mr Khan has argued, the world must “cling to the law” more tightly. The unspoken danger is that, should he and others fail to curb the horrors, the law will collapse and there will be little left to hold onto. ■

Gummed up

United Nations Security Council, number of vetoes



Business



Artificial intelligence and the grid (1)

The great AI power grab

HOUSTON

Machine learning needs an awful lot of electricity. Where will it come from?

BIG TECH wants more computing power. A lot more. According to their latest quarterly reports, Alphabet (which owns Google), Amazon and Microsoft—the world’s cloud-computing giants—collectively invested \$40bn between January and March, most of it in data centres to deal with growing artificial-intelligence (AI) workloads. Last month Meta, which does not have a cloud business but does run a data-hungry social-media empire, said its capital expenditure could reach \$40bn this year as a result of AI-related projects. That is not far off the \$50bn that Saudi Aramco, an oil colossus, is planning to splurge. Microsoft is likely to spend more.

The comparison with the famously capex-happy energy industry is apt not just because of the sums involved. AI needs vast amounts of processing power. And that processing power needs vast amounts of electricity. On May 2nd Bob Blue, chief executive of Dominion Energy, one of America’s biggest utilities, said that data-centre developers now frequently ask him

for “several gigawatts” (GW). Dominion’s total installed capacity is 34GW.

JPMorgan Chase, a bank, calculates that Alphabet, Amazon’s cloud arm (AWS), Meta and Microsoft consumed 90 terawatt-hours (TWh) of electricity in 2022, as much as Colombia. And that was mostly before ChatGPT touched off the AI revolution in November that year. The ensuing hoopla led the International Energy Agency (IEA), an official forecaster, to predict that data centres (including those dedicated to AI and equally energy-hungry cryptocurrencies) will eat up more than

800TWh globally in 2026, double the amount in 2022 (see chart on next page). BCG, a consultancy, reckons data processing could triple its share of American power consumption by 2030, to 7.5%.

And not just any power will do. The tech titans want theirs to be clean. In April their industry association warned Georgia Power, which had managed to fast-track the approval of 1.4GW of new fossil-fuelled generation by pointing to rising demand from data centres, that its members would build fewer of these in the southern American state if the utility spewed extra carbon. Combined with rising demand from increasingly electrified transport, heating and parts of heavy industry, digital technology’s power needs are putting enormous strain on the businesses that generate and distribute electricity.

BloombergNEF, an information firm, reckons that annual grid investment required to fully decarbonise global electricity by 2050 will need to rise from about \$300bn in 2022 to \$600bn in 2030 and well over \$800bn in 2050. Risk-averse utilities, which would normally undertake grid-expansion projects under the watchful eye of cost-minded regulators, have neither the money nor the appetite to do so.

Enter big tech itself. The deep-pocketed giants have been the biggest force behind green “power-purchase agreements”, which helped kickstart America’s renewables boom by persuading utilities and

→ ALSO IN THIS SECTION

52 What AI can do for the grid

53 The war for talent

54 Bartleby: CareerTok

55 Will chatbots eat Indian IT?

56 Schumpeter: Alibaba’s comeback

▶ other investors to build wind and solar farms. They are now getting in on the clean-energy action more directly.

On May 1st Microsoft and Brookfield, a big infrastructure investor, announced a deal to build 10.5GW of renewables capacity in America and Europe by 2030. This is meant to enable the software giant to meet its pledge to get 100% of its electricity, 100% of the time, from zero-carbon sources by 2030. The two partners have not revealed the price-tag, but adding 1GW of wind or solar capacity can cost about \$1bn.

One problem is that data centres use power at a steady rate, even when the sun isn't shining nor the wind blowing. In March Sidewalk Infrastructure Partners, a technology company co-created by Alphabet, presented a detailed plan for how to make data-processing more flexible. It involves a combination of microgrids (which can run independently but also exchange energy with others nearby), batteries and advanced software in order to enable shifting less time-sensitive tasks, such as training AI models, to periods of fallow demand. Jonathan Winer, one of Sidewalk's founders, expects such data centres to pop up first in energy-constrained places like Arizona and California.

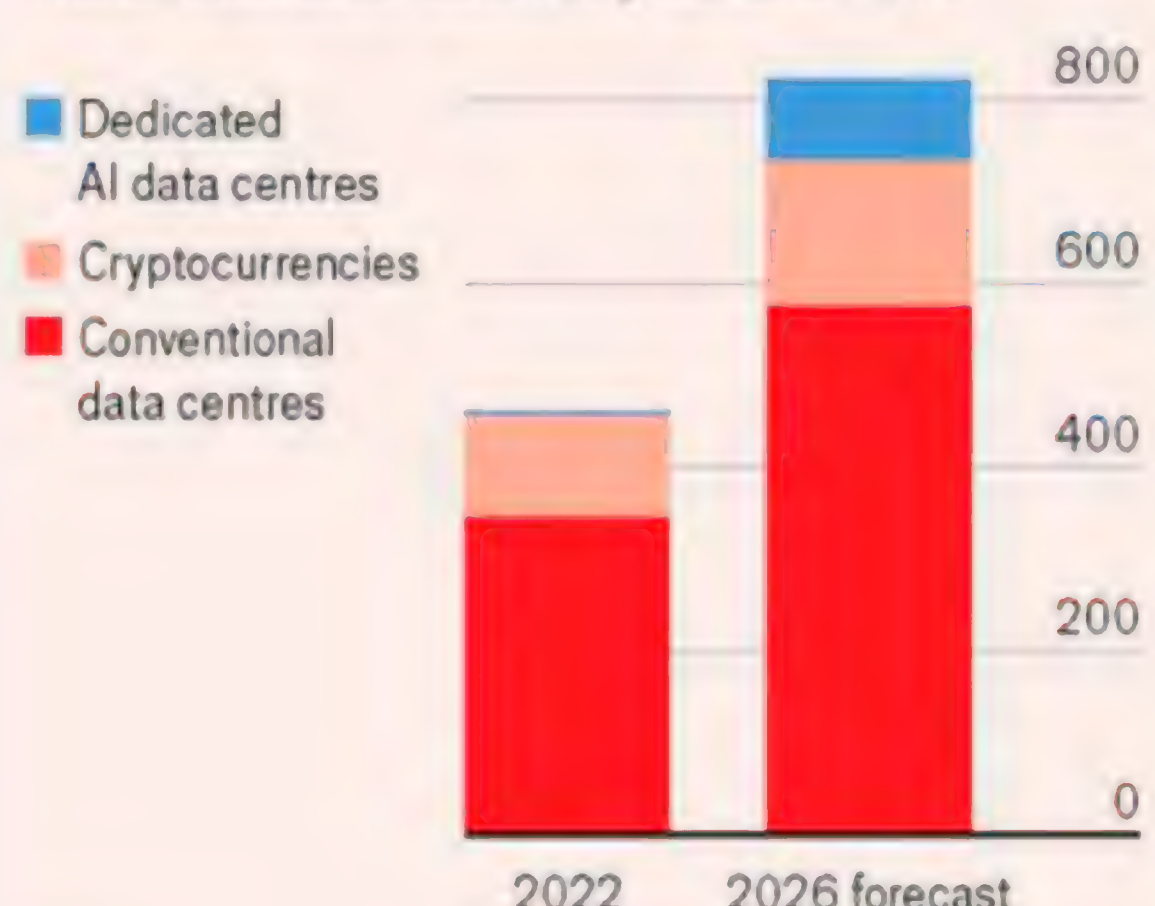
Renewables are not the only area of big tech's power interest. In March AWS paid \$650m for a 960-megawatt (MW) data centre in Pennsylvania powered by a nuclear reactor next door. Microsoft has struck a deal with Constellation Energy, America's biggest nuclear operator, for supply of nuclear power for its data centre in Virginia, as a backstop when wind and solar are unavailable. Both firms have also been looking at "small modular reactors", a promising though unproven nuclear technology.

Google, meanwhile, is dabbling in geothermal energy. It has signed the first-ever corporate deal to develop "enhanced" geothermal power with Fervo, a startup that has raised \$430m in funding. Inspired by the shale industry, the hot-rocks hotshot has developed horizontal wells, monitored using fibre-optic cables. Its site in Nevada produces round-the-clock, carbon-free power for the local grid—which Google then acquires. Tim Latimer, Fervo's boss, says that every drilling rig his firm operates can add 100MW of power. The company is developing a 400MW commercial plant in Utah that will start feeding the grid in 2026. The Department of Energy reckons that innovations like Fervo's could expand geothermal output in America around 20-fold, to more than 90GW, by 2050.

Google and Microsoft have also teamed up with Nucor, a giant American operator of steel mini-mills, which consume lots of electricity. In March the trio announced that they will aggregate demand and jointly offer contracts to clean-energy projects, both early-stage commercial ones and en-

Hungry hungry robots

World, estimated electricity demand, TWh



Source: IEA

tirely novel "first-of-a-kind" ventures. The idea is to guarantee custom for developers of promising technologies like long-duration energy storage, clean hydrogen, next-generation geothermal and nuclear energy.

The AI industry's most exotic power plays come courtesy of Sam Altman, the techno-optimistic boss of OpenAI, maker of ChatGPT and Microsoft's main model-making partner. In a quest to power the AI revolution, he has backed Helion, a nuclear-fusion startup, and Exowatt, which is developing solar modules that can both generate electricity and store it as heat. Mr Altman is now hoping to raise \$500m for Oklo, which is working on nuclear micro-reactors that run on spent fuel from larger ones and that could power individual factories, corporate campuses and, of course, AI server farms. These wagers may seem fanciful. Then again, 18 months ago so did the idea that an AI could write essays or paint like a human. ■

Artificial intelligence and the grid (2)

Getting serious

AI and other clever fixes are bringing power lines into the 21st century

THE RISE of artificial-intelligence (AI) data centres, with their insatiable hunger for electricity, is asking an awful lot of the world's utilities and grid operators (see previous article). On the bright side, AI can also give a fair bit back, by helping transform ancient, overloaded and dumb electricity networks into something fit for the digital and decarbonised age. America's Department of Energy reckons that AI and other improvements to the country's existing grid could liberate as much as 100 gigawatts (GW) in transmission and distribution capacity over the next three to five years without the need to build new lines.

That is about 13% of current peak demand of around 740GW.

Some of these "grid-enhancing technologies" are now being rolled out, thanks to doughty startups developing them, their financial backers and utilities, which are becoming less resistant to innovation. GETs, as they are known for short in the industry, fall into two main categories: hardware upgrades to transmission grids and software upgrades to those grids' brains.

Power cables have changed little in the past century. Most still consist of aluminium wrapped around a steel core. Grid Strategies, a consulting firm, reckons that replacing these materials with advanced conductors on just a quarter of America's ageing transmission lines would enable the interconnection of an extra 27GW of zero-carbon power generation a year for the next decade. Because renewable energy is cheaper than dirtier kinds, that could save consumers at least \$140bn over ten years. And because replacing old cables with new ones on existing lines avoids having to secure lots of permits, it can be done faster than erecting all-new pylons.

One promising substitute is carbon fibre. TS Conductor, a Californian startup, uses this material instead of steel in its cables' core. The result is much stronger, four-fifths lighter and able to carry up to three times as much power. It also sags far less, which makes it less prone to short-circuits and fires. The company, which is backed by National Grid, a British utility, and Breakthrough Energy Ventures, a climate-tech fund started by Bill Gates, a tech billionaire, is installing its equipment in North Dakota and has a \$100m joint venture for future projects. Another startup, NanoAL Lightning, has come up with an aluminium-alloy core that is also both more conductive and stronger than steel.

Another physical upgrade is to place big batteries at strategic choke-points along power lines. Last year Zenobe, a British firm, installed Europe's largest such battery in north-west England. In September it received a \$750m investment from KKR, a giant asset manager placing big bets on infrastructure.

Some systems involve two sets of grid-scale batteries. The first sits between big wind or solar farms and the grid. It is charged using renewable energy whenever the sun is shining and the wind blowing, and discharges when the grid is not congested. The second set resides between the grid and places that demand high loads, such as AI data centres. It absorbs the green energy during those uncongested periods, and discharges the power locally at peak demand.

Fluence, a pioneering energy-storage firm jointly controlled by Siemens, a German industrial giant, and AES, an American utility, is using this two-step approach ▶▶

▶ to deploy 200 megawatts (MW) in sections of Germany's grid. Hydrostor, a Canadian startup backed by Goldman Sachs, an investment bank, uses compressed air stored in underground caverns as grid-scale batteries. Its Silver City project in south-eastern Australia, one of the world's biggest applications of this concept, will strategically place 200MW of long-duration storage to eliminate the need for big new transmission lines in the area.

There is an even less intrusive approach to boosting transmission capacity than stripping out old cables or installing new batteries. Known as dynamic line rating (DLR), it uses sensors to monitor temperature, wind and other local conditions to determine how much power it is safe to channel down a line at any one time. Most regulators tell grid operators to keep throughput below conservative limits based on historic seasonal averages. So, for example, less power is allowed to flow in warmer summer than in chillier winter.

But if those summer days aren't as warm as usual, that means more energy could potentially be flowing but isn't, explains Jorgen Festervoll of Heimdall Power, a Norwegian startup. The firm encases DLR sensors in hardened spheres and peppers them throughout the grid using autonomous drones. LineVision, an American rival, has successfully demonstrated DLR technology with AES in Ohio and Indiana. As Mr Festervoll puts it, the real-time information they collect lets grid operators always drive closer to the variable speed limit.

Intangible benefits

DLR is one place where clever hardware meets clever software, including lots of AI. There are others, many of which do not involve touching the transmission lines at all. Cognite, a Norwegian software firm, has developed a program that makes decades' worth of grid data, which in the past would have been hard to track down and manipulate, available readily to operators. Software made by Envelio, a startup controlled by E.ON, a big German utility, creates detailed digital twins of local grids that can be used to pinpoint the best sites for distributed-energy resources (which can include anything from wind turbines and solar panels to heat pumps and batteries of parked electric vehicles). Envelio's technology is used to manage such resources on roughly half the German power-distribution network.

The idea underlying all these software efforts is to make existing grids more flexible. Users could shift their power needs to quieter periods, when electricity is both more abundant and cheaper. That would lower peak demand, sparing utilities from installing a lot more new capacity.

One utility betting on flexibility is



Pillars of innovation

Octopus, an upstart valued at \$8bn. It serves a quarter of Britain's retail electricity customers and is expanding in Europe and America. Kraken, its AI platform, has made it simple for over 1.5m British households to optimise when they consume energy, whether it be to run the washing machine or charge an electric car. It can all be done on a smartphone app. Devrim Celal, who heads Kraken, says this has saved customers over \$200m in the past year.

Mr Celal thinks the same can be done for all those power-hungry data centres, especially as they replace old back-up diesel generators with batteries and fuel cells amenable to precise digital control. Huge potential savings come from anticipating and varying the amount of cooling needed to keep the servers humming, which can account for over a third of a server farm's energy needs. Less time-sensitive computing loads could be delayed until cleaner and cheaper electricity is available. More time-sensitive ones might be directed to data centres in places where it is. Kraken already does this, he says, and the additional distance travelled by the data makes little difference to computer users.

Such innovations alone are unlikely to be enough to ensure that the decarbonising world has enough electricity to go round. The grid will need to be expanded, too, says Pedro Pizarro, chief executive of Edison International, which owns Southern California Edison (SCE), a big power utility. When it comes to the innovating, startups, their backers and utilities are certainly doing their bit. The authorities are slowly beginning to do theirs. On May 13th the Federal Energy Regulatory Commission, an American government agency, will unveil its latest plans to speed up the development of long-distance transmission lines. Power to them. ■

The labour market

Back to work

The war for talent has quietened down—for now

TWO YEARS ago companies in America were scrambling to plug vacancies from shop floors and call centres to corporate headquarters. Workers laid off during the pandemic proved difficult to lure back, particularly those who had opted for early retirement. Others who spent their lockdowns dreaming of new beginnings resigned en masse once business resumed as normal. The share of American workers quitting their jobs each month went from 2.3% before the pandemic to a record 3% at the start of 2022. By March of that year there were two job openings for every unemployed worker in America.

That frenzy has now passed. As economic growth has moderated, employers have reined in hiring. On May 3rd the Bureau of Labour Statistics reported that America added 175,000 jobs in April, well below expectations. Companies including Nike, a sportswear brand, and Tesla, a maker of electric vehicles, have announced lay-offs in recent weeks. The ratio of job openings to unemployed workers has dwindled to 1.3. With quit rates down to 2.1%, the "great resignation" appears to have fizzled out (see chart).

Workers sense that their power is waning. The number of active strikes in America fell from a post-pandemic high of 76 in September to 40 in March, according to a tracker compiled by researchers from Cornell University and the University of Illinois. The share of work that employees do at home has hovered between 25% and 30% since the start of last year, less than people say they would like. Companies, meanwhile, are cracking down on unruliness. Google, a technology giant, sacked around ▶▶

The old normal

United States, job quits as % of non-farm payrolls



Source: Bureau of Labour Statistics

▶ 50 pro-Palestinian employees last month for protesting over a cloud-computing deal with Israel's government.

For bosses, though, the war for talent is not entirely over. Fully 70% of American companies surveyed earlier this year by ManpowerGroup, a staffing firm, said they were having difficulty filling roles. That is down from 75% last year, but up from 40% a decade ago. Johnny Taylor junior, head of the Society for Human Resource Management, a business association, says that the

job market has shaken off the “unsustainable craziness” of recent years, but is expected to remain tight.

One reason is demography. The World Bank forecasts that over the course of the 2020s the share of America's population aged between 20 and 64 will fall from 59% to 56%. A second reason is the growing mismatch between the skills employees have and the ones employers need as the economy continues to digitise. The emergence of generative artificial intelligence

has heightened that concern, says Anu Madgavkar of McKinsey, a consultancy.

Despite all their talk of retraining workers for the digital age, companies are dragging their feet. Average budgets for such purposes among American firms with over 10,000 employees fell from \$19m in 2022 to \$16m last year, according to *Training*, a trade publication. Such costs are often among the first to be trimmed when business slows. Once it picks up again, bosses may rue their skimpiness. ■

BARTLEBY *CareerTok*

For Generation Z, TikTok is the new LinkedIn

YOUNG JOB-SEEKERS are different from their elders. They expect employers to be cuddlier, more forgiving and more generous with perks and pay cheques. The way they go about hunting for work is also distinct. Rather than relying on family and friends, a growing number of Americans are turning to TikTok in search of advice that will help them climb those all-important first steps up the career ladder.

Scrolling through their feeds on the short-video app they might come across a creator called Lauren Spearman. Ms Spearman uploads videos about “red-flag job postings” and “unreasonable job applications”. Or they might find Kennie Bukky, who shares her “salary journey” and hot tips for pay negotiations. If they scroll down further, sooner or later they are likely to happen upon Brittany Peatsch. She went viral after posting a video account of her own experience being laid off from Cloudflare, a software company, and now creates videos offering advice to others suffering through similar ordeals.

Videos like these, with the hashtag CareerTok, have had over 2bn views on the app. Their creators are a diverse bunch: people old enough to be former chief executives, 30-somethings recounting their own early career mistakes, the youngsters themselves. Many of those viewing the clips belong, like your guest columnist, to Generation Z. Given that this cohort, born between 1997 and 2012, will make up 27% of the workforce in the OECD club of mostly rich countries by 2025, social-media career counsel is likely only to grow in prominence.

One thing the success of career-related content on TikTok makes clear as day is that Gen-Zers desire transparency in the workplace. “I love that people are

recording their lay-offs because it is exposing the people who are doing terrible lay-offs,” says Chris Williams, formerly in charge of human resources at Microsoft, a software giant, who is now a career adviser—and a content creator himself. Ms Spearman started posting videos on TikTok to document the difficulties she was having job-hunting. “There was a lack of salary transparency, I was set unreasonable tasks, I wasn’t getting any feedback,” she recalls. “In some instances, it was complete ghosting.”

Ms Spearman's videos are designed primarily to encourage companies to do better. A surprising number respond—probably a reflection of the power of TikTok, but also a sign of workers' expectations. After she posted a “red flag role” clip about Never Fully Dressed, the clothing firm replied to her and the job listing was updated to reflect her criticism. In the aftermath of Ms Peatsch's viral lay-off video, Cloudflare's chief executive, Matthew Prince, tweeted on X that the video was painful to watch. He added that the company was determined not to make

similar mistakes in the future. Businesses have hired Ms Spearman to work on marketing campaigns. CareerTok stardom can, it seems, lead to a career beyond social media.

CareerTok gives the creators and viewers a sense of solidarity. More important, its roaring success and billions of views also give them strength in numbers. Ms Bukky, a black woman, hopes that her thoughts and experiences regarding pay negotiations make her viewers more confident in their own professional lives. TikTokers are, she says, forcing employers to ask themselves, “are we paying our employees properly and are we treating them fairly?”

CareerTok videos do not always get the same positive reception. Lay-off clips in particular have faced a backlash from certain quarters. Even if they do not admit to it, many older executives doubtless find them to be an expression of Gen-Z entitlement. On X, Candace Owens, a prominent right-wing commentator, called Ms Peatsch's Cloudflare video “young and stupid”.

A bigger worry than grumpy managers and hectoring conservatives is potential legal liability. David Harmon, an employment lawyer, cautions creators to “be mindful”. It is all too easy to post something that runs afoul of non-disclosure and confidentiality agreements, securities laws or trade secrets, he says—valuable career advice in itself.

Neither the wrath of old fogeys nor fear of legal consequences is likely to stop venues like CareerTok becoming the site of a workplace struggle between the expectations of Gen-Z workers and their employers. The struggle is not going away, even if TikTok is banned in America. Young professionals will simply find another outlet.



Information technology

Code for trouble

BANGALORE

Will chatbots eat India's business-services industry?

WHAT IS THE ideal job to outsource to artificial intelligence? Today's AIs, in particular the ChatGPT-like generative sort, have a leaky memory, cannot handle physical objects and are worse than humans at interacting with humans. Where they excel is in manipulating numbers and symbols, especially within well-defined tasks such as writing bits of computer code. This happens to be the forte of giant existing outsourcing businesses—India's information-technology (IT) companies. Seven of them, including the two biggest, Tata Consultancy Services (TCS) and Infosys, collectively laid off 75,000 employees last year. The firms say this reduction, equivalent to about 4% of their combined workforce, has nothing to do with AI and reflects the broader slowdown in the tech sector. In reality, they say, AI is an opportunity, not a threat.

Business services are critical to India's economy. The sector employs 5m people, or less than 1% of Indian workers, but contributes 7% of GDP and nearly a quarter of total exports. Simple services such as call centres account for a fifth of those foreign revenues. Three-fifths are generated by IT services such as moving data to the computing cloud. The rest comes from sophisticated processes tailored for individual clients. Capital Economics, a research firm, calculates that an extreme case, in which AI wiped out the industry entirely and the resources were not reallocated, would knock nearly one percentage point off annual GDP growth over the next decade in India. In a likelier scenario of "a slow demise", the country would grow 0.3-0.4 percentage points less fast.

The simplest jobs are the most vulnerable. Data from Upwork, a freelancing platform, shows that earnings for uncomplicated writing tasks like copy-editing fell by 5% between ChatGPT's launch in November 2022 and April 2023, relative to roles less affected by AI. In the year after Dall-E 2, an image-creation model, was launched in April 2022, wages for jobs like graphic design fell by 7-14%. Some companies are using AI to deal with simple customer-service requests and repetitive data-processing tasks. In April K. Krithivasan, chief executive of TCS, predicted that "maybe a year or so down the line" chatbots could do much of the work of a call-centre employee. In time, he mused, AI could foretell gripes and alleviate them be-



fore a customer ever picks up the phone.

But Mr Krithivasan and fellow Indian IT bosses believe that in the age of AI the world is going to need more tech workers, not fewer—and a lot of them will come from India. They are thinking how to turn the AI revolution to their firms' advantage.

One way is to use AI to boost the firms' productivity. Infosys has rolled out AI helpers to all 330,000 of its employees. It says this has already led to a 10-30% reduction in the time needed to build some new applications. Sales assistants who previously waited hours or days to get input from colleagues in order to answer clients' questions can now respond in 30 minutes.

The hope is that added efficiency will greatly boost demand for such services. Another source of fresh demand—and the IT companies' second big opportunity—is for all-new tasks tied to clients' deployment of AI in their organisations. The IT

firms have been preparing for this. A paper last year by Alexander Copestake of the IMF and colleagues identified "near-exponential growth" in demand for AI-related skills in India's service sector since 2016. Two in five Indian AI job postings in the 2010s were in Bangalore, which is home to Infosys and where TCS has a large campus.

These recruits have been busy. Infosys has already built AI tools, such as chatbots that answer queries based on internal company data, for 50 clients. An executive at TCS says his teams have been developing voice assistants for customers since before anyone heard of ChatGPT. Some liken the current AI moment to the lead-up to the year 2000, when Western businesses raced to prevent their computer systems from being fatally flummoxed by the zeroes marking the new millennium. Fear of the "Y2K bug" enriched the Indian IT firms. A series of mini-Y2Ks, as clients rush to stay ahead of the fast-changing technology, may create another bonanza.

The outsourcing giants hope that AI will also help them win back some business they have been losing to their multinational clients' own Indian IT operations. In-house "global capability centres" have been mushrooming in India in recent years. They make it easier for companies to safeguard sensitive data and intellectual property. But if AI tools become an off-the-shelf commodity like cloud storage, then economies of scale could give the IT-services specialists an edge. Last June Infosys acquired the IT centre in India belonging to Danske Bank, a Danish lender.

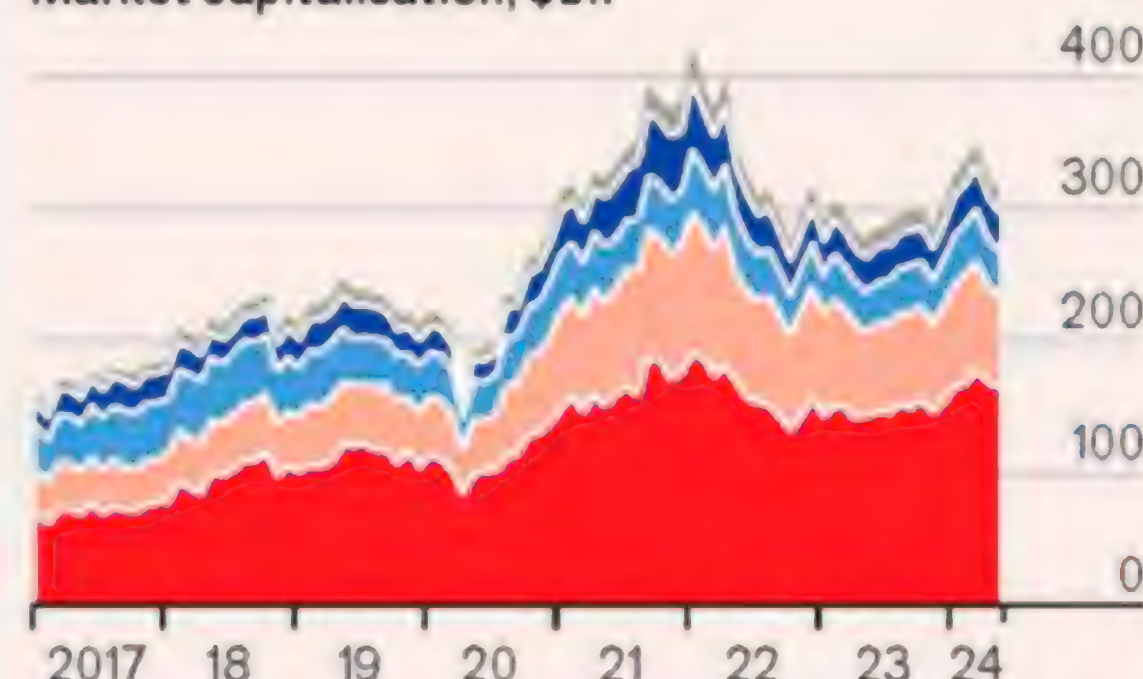
Nandan Nilekani, chairman and co-founder of Infosys, argues that his company and its Indian IT rivals will benefit from what he calls "velocity of experience". Already, he observes, one client wants a coding "copilot"; another wants better customer support; a third wants to predict how a wildfire might affect an energy utility. Solving these diverse problems makes firms like Infosys well-suited to tackle new scenarios, he explains. In time, it may help them avoid a cliff-edge. ■

Back-office behemoths

Selected Indian IT-services companies

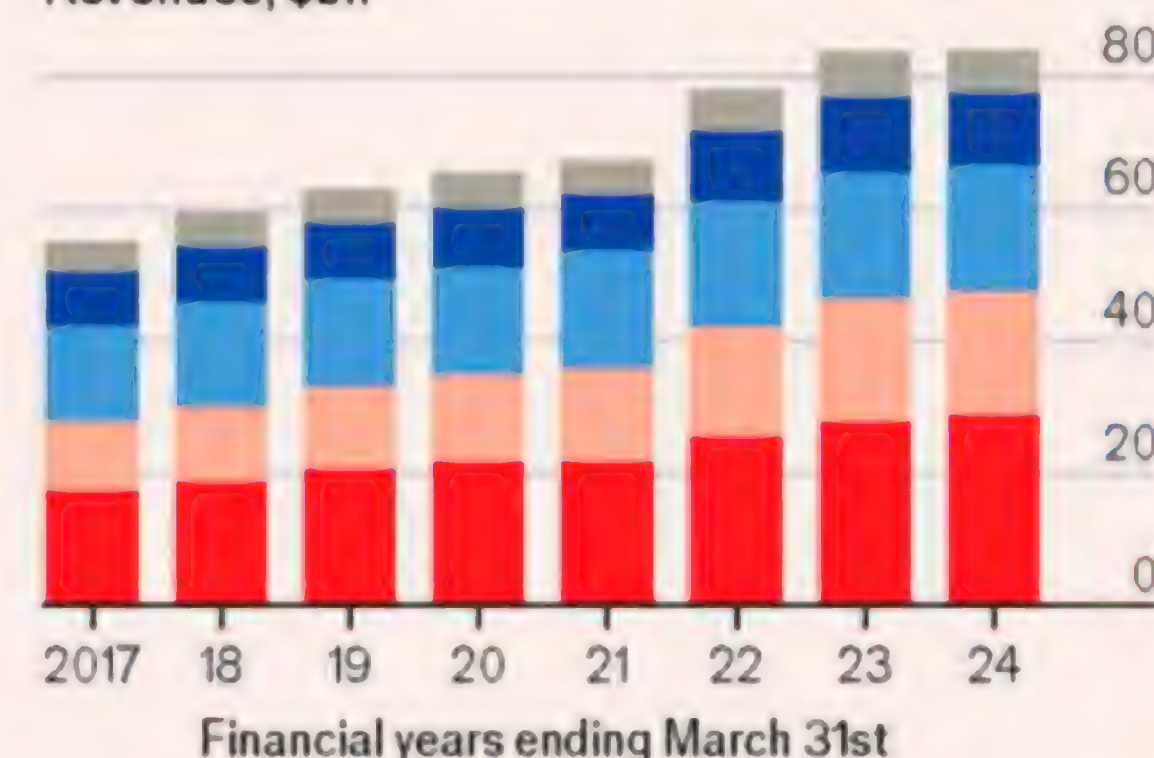
■ Tata Consultancy Services ■ Infosys ■ Cognizant

Market capitalisation, \$bn



■ Wipro ■ Tech Mahindra

Revenues, \$bn



SCHUMPETER

Reopen sesame

China's e-commerce giant is no longer being stripped for parts. Good



ALIBABA USED to be synonymous with the success of Chinese e-commerce. Lately the company has been synonymous with its woes. In 2021 it became the grimacing face of an official crack-down against China's biggest technology firms, whose growing size and seeming social indispensability must have spooked the Communist Party. It was fined a record \$2.8bn for monopolistic practices that, the government said, were hurting customers and merchants. Its co-founder, Jack Ma, disappeared into self-imposed exile. Rivals such as PDD, which began life as a group-buying platform, and ByteDance, which owns TikTok and its Chinese sister app, Douyin, proved better at catering to thrifty consumers and at adapting to new trends such as "social commerce", which mixes shopping and showbusiness.

In late 2022 Alibaba's market value, which two years earlier had exceeded \$800bn, fell below \$170bn, close to a record low since its blockbuster initial public offering (IPO) in 2014. To reverse the decline, in March last year the company decided to split itself in six. Five firms were spun out: a logistics business (Cainiao), a cloud-computing one (Aliyun), an international e-commerce operation (which contained Alibaba's main global platform, AliExpress, and a few regional subsidiaries), a digital-services company (which controls Ele.me, a food-delivery app) and a small media group. Alibaba proper retained the domestic retail operation, which is centred around Taobao and Tmall, its two giant marketplaces, and which accounts for nearly 70% of the group's revenues.

In the past year—and especially since Daniel Zhang was replaced as chief executive in June by Eddie Wu, one of Mr Ma's co-founders and closest lieutenants—this dismantling strategy has, step by step, been dismantled. First Mr Wu was installed as head of the cloud business, which Mr Zhang took over after the split. Its flotation was called off in November. The following month Mr Wu became head of Taobao. In March he scrapped the IPO of Cainiao, instead purchasing the 36% of it that Alibaba did not already own.

Mr Ma seems to approve. In April he sent a memo to staff, many of whom still revere him. He wrote of rectifying "past mistakes". He did not say what those were, but many observers took it to mean the troubled break-up plan and struggle to compete with

PDD and others. It is easy to dismiss this as Mr Ma's hubris: no empire-builder likes to see his life's work undone. Yet staying intact may be the best shot Alibaba has at reviving its fortunes.

The split always looked like a defensive move, designed primarily to placate the party rather than unlock shareholder value. China's rulers now appear placated, perhaps because a diminished Alibaba no longer looks like a threat or maybe because they have bigger things to worry about, such as a slowing economy. With the target off its back, Alibaba is once again the master of its own fate. That fate is tied to its ability to compete with new e-commerce challengers both at home and abroad. And that ability, in turn, could turn on its logistics and cloud businesses.

Holding on to Cainiao is a bet on the international business. It allows Alibaba to keep parcels flowing smoothly to shoppers anywhere in the world—and, in America and ten other markets, in just five days. This is critical as Mr Wu experiments with a new business model. Alibaba has long been primarily a collection of marketplaces connecting buyers and third-party sellers. A new AliExpress feature, called Choice, involves the firm actually buying products from sellers and shipping them to its foreign buyers.

This is a departure from Alibaba's original business model. It is reminiscent of Amazon, Shein, a Chinese-born clothing upstart beloved of young Western fashionistas, and to an extent PDD's thriving American business, Temu (whose sellers agree to strict rules on prices and shipping). It is more capital-intensive—requiring Alibaba to hold its own inventory—but enables better quality control of products shipped to consumers. This is important in rich-world markets, where shoppers expect nothing less, but also in China, where consumers are becoming more discerning. It appears to be working. Choice was behind the 44% year-on-year jump in international revenues in the final three months of 2023.

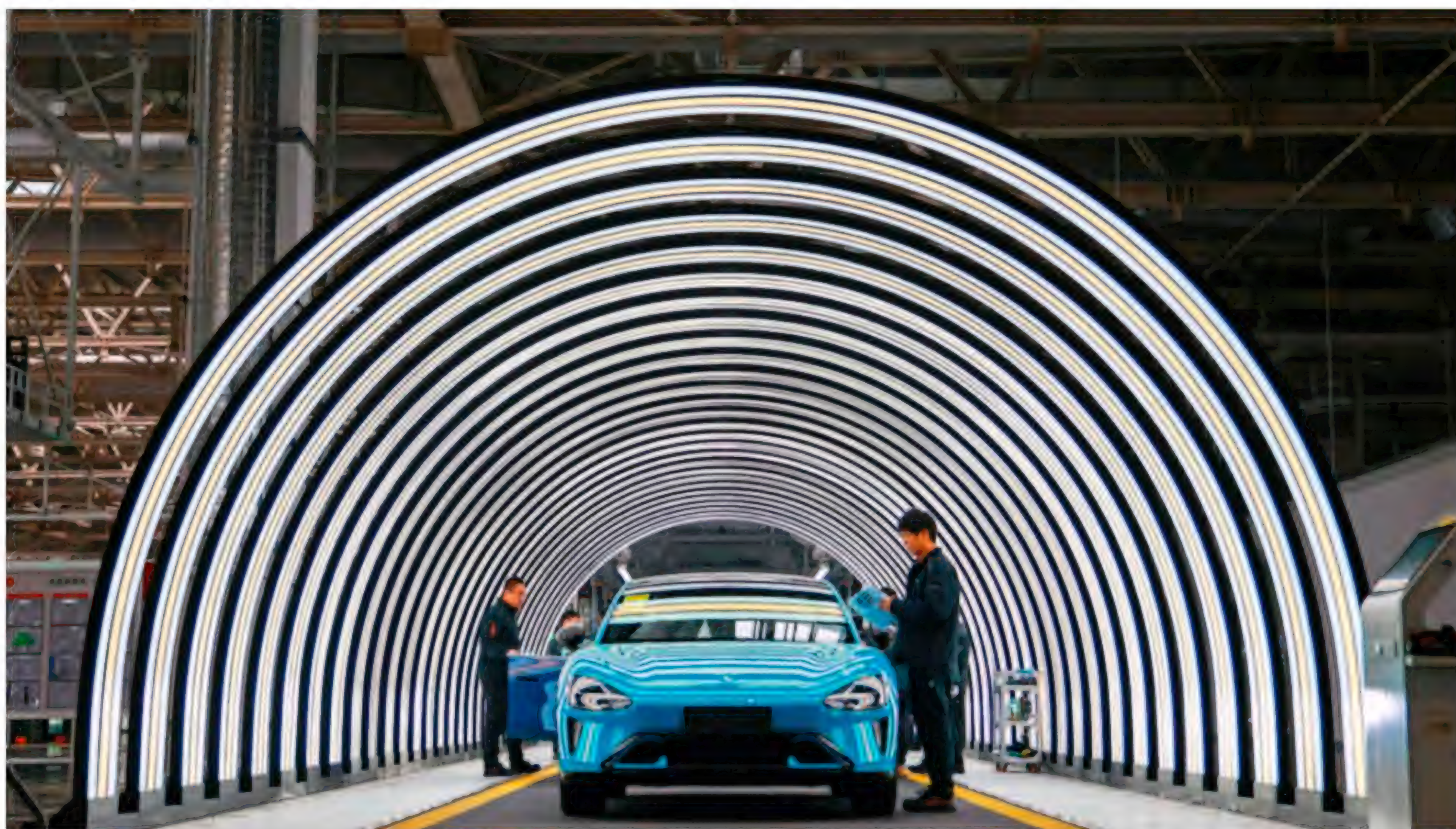
Whereas keeping Cainiao should help Alibaba compete with Temu and Shein abroad, reintegrating Aliyun is meant to provide a way of countering ByteDance and others at home. The value of goods sold on Douyin and Kuaishou, a rival video app popular in China, is ballooning. TikTok is experimenting with social commerce in foreign markets. Alibaba has no meaningful social-media business, and no plans to create one. Instead, it is trying to retain shoppers by enhancing its customer experience with the help of artificial intelligence. It says more users are trying Wenwen, Taobao's own ChatGPT-ish AI function, which guides users through purchasing decisions.

Gross merchandise valour

Alibaba has a fight on its hands. Temu and Shein have outspent it on logistics and marketing abroad, especially in America. A big push there could rack up losses and upset jittery investors. In China, the online economy is slowing. S&P Global, a rating agency, expects digital transactions to grow by 8-9% annually over the next two years—faster than GDP but sluggish compared with the average of 13% over the past five years. In the last quarter of 2023 Douyin and PDD's Pinduoduo platform accounted for 90% of additional sales, reckons Bernstein, a broker. Alibaba lost ground. Chatty AI may not be enough to stop shoppers seeking thriftier options or a bit of social-commerce fun to brighten their days.

Mr Wu may outline his next moves when Alibaba presents its full-year results on May 14th. He may be right that the company is worth more whole than as a collection of separate parts. How much more will depend on factors beyond his control. ■

Finance & economics



Trade wars

Electric cars and more

HONG KONG

Despite Xi Jinping's protestations, China does have an overcapacity problem

THE EU IS no stranger to overcapacity. Its economic landscape once featured butter mountains, milk lakes and other landmarks of excess production—the surreal results of its common agricultural policy, which guaranteed high prices to dairy farmers. Thus the president of the European Commission, Ursula von der Leyen, knew what she was talking about when she warned Xi Jinping, China's ruler, about his country's "structural overcapacities" at a recent meeting in Paris.

Her concern was not farming but manufacturing. Europe is worried about a flood of electric vehicles and steel from China, which could displace cherished industries and jobs in the union. China's steel exports, measured in tonnes, increased by more than 28% in the first three months of this year, compared with a year earlier. Its exports of new-energy vehicles increased by almost 24%. In response, the EU is considering "countervailing" tariffs to offset the subsidies that have assisted the growth of China's industry.

Mr Xi is also familiar with Chinese overcapacity. In his first term, his main economic policy was supply-side structural reform. In 2016 the state cut coal capacity by 290m tonnes and steel capacity by over 60m. China removed more capacity in these industries than most countries have ever possessed. But in Paris, Mr Xi rejected Europe's concerns, at least in the new-energy industry: "The so-called 'problem of China's overcapacity' does not exist, either from the perspective of comparative advantage or in light of global demand."

→ ALSO IN THIS SECTION

58 Lessons from a provincial grocer

59 How Ukrainian farmers dodge taxes

60 The cocoa market's meltdown

61 Why European banks are thriving

62 Buttonwood: Busy trading floors

63 Free exchange: Weakening the dollar

Who is right? China's problem is not always as easy to spot as Europe's mountains and lakes. "Capacity" sounds like a technical term, which might be measured in tonnes or cubic metres. But it is rarely economical to run a plant at its full technical limits. Moreover, in a rapidly growing economy that is evolving quickly, existing capacity can become obsolete or overwhelmed faster than in a mature economy, as Dianqing Xu of Huron University College and Ying Liu of Dongbei University of Finance and Economics have argued.

Theorists have tried to define full capacity as a level of production high enough to defray the fixed costs of a plant and low enough to prevent costly strain on men and materials. But in practice, economists measure capacity by asking managers. Surveys in China show "capacity utilisation" fell to low levels in the first quarter of this year, about two percentage points below the pre-pandemic average. Utilisation was lower only when covid-19 first struck and in 2016, when Mr Xi introduced his supply-side surgery. From the perspective of this official statistic, China's overcapacity exists, whatever the country's president says.

It may even be understated. Take the steel industry. At 77%, its utilisation level is close to the average since 2016, seemingly belying Europe's concerns. But that level masks falling prices and profits. An industry can use a lot of capacity if it is willing to sell its wares at ruinous prices.



Measures of capacity utilisation can also miss the role of subsidies. China's support for its electric-vehicle industry included clever inducements to demand, such as reduced parking fees and free licence plates. Buyers are still able to benefit from a tax break worth up to 30,000 yuan (\$4,100). Other subsidies were not directed at consumers, but could be passed on to them through lower prices. Together, they increased demand as well as supply, bolstering capacity utilisation and profits.

China's purchases of conventional cars, powered by internal-combustion engines, used to soak up almost all domestic production. Owing to the success of electric vehicles, that is no longer the case, meaning subsidies in one area have contributed to excess capacity in another. Conventional carmakers, many of them including joint ventures with foreign firms, have therefore turned to customers abroad. The surge in exports of conventional cars dwarfs the electric vehicles Mrs von der Leyen singled out for concern (see chart).

Mr Xi could argue that some subsidies are warranted on environmental grounds. China, a middle-income country, is dipping into its pockets in order to subsidise products that will benefit everyone. And there is no good economic reason why China should limit production of these goods to the scale of its domestic demand. According to the principle of comparative advantage, it should concentrate on its strengths, becoming a net exporter of such products. Its capacity should thus be judged relative to global demand. Even in this light, however, China's plans look ambitious. If they are fulfilled, then by the end of next year, China will make more than enough lithium-ion batteries to meet global demand three times over, according to BloombergNEF, a research firm.

Why is China so prone to overcapacity? The problem is often attributed to central-government diktats. But China's worst excesses are not a result of classic central planning, which could at least keep a lid on output. They instead reflect the combination of central directives and competition between local governments to fulfil them. China's attempts to cull capacity can also backfire. Firms know consolidation will favour the strong. That gives them added incentive to grow before the axe falls.

Likewise overcapacity is often most glaring not in sectors dominated by state-owned enterprises, such as telecoms or tobacco, where a small clutch of firms keep their output limited and their profits high. The problem is more serious in industries with a mixture of private and state-owned enterprises, as Zhou Qiren of Peking University once pointed out. In the face of private competition, state-owned enterprises lose custom but do not retreat or disappear. They linger under government

protection. That keeps capacity higher than it otherwise would be.

The industries suffering most from overcapacity today are casualties of China's ill-starred property sector, where private and state developers have long vied with each other. A collapse in property sales has left many neighbouring industries looking oversized. Adam Wolfe of Absolute Strategy Research cites the example of excavators. Until mid-2021, China bought most of the diggers it produced. But domestic sales have plunged, meaning China has abruptly emerged as the world's biggest exporter of such equipment. Another case is cement, and similar materials, where capacity utilisation is down to 62%.

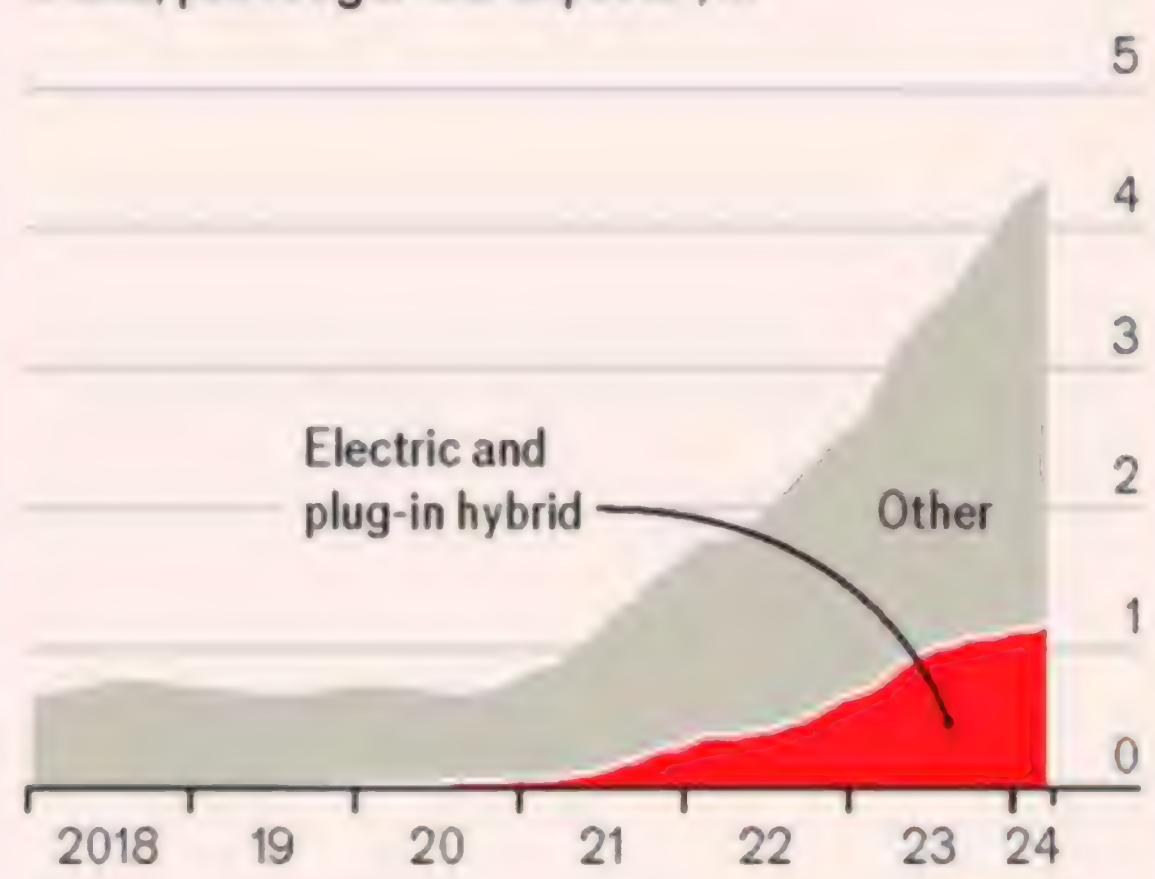
Could anything other than more supply-side reform ameliorate overcapacity? Even in China, the problem can be self-limiting. In property-adjacent industries, such as home appliances and steel, falling prices are both a consequence of overcapacity and a potential cure. Low prices are a signal to entrepreneurs and investors to steer resources towards other, more promising sectors. It was precisely Europe's refusal to let dairy prices fall that perpetuated its butter mountains and milk lakes.

But in China price declines have been more widespread. Producer-price inflation has been negative for 18 months in a row. The GDP deflator, a broad measure of prices, has declined year on year for four consecutive quarters. When prices fall in an industry, it can be a sign that supply is excessive. When prices fall across an economy, it usually means demand is deficient, because confidence is low and macroeconomic policy too tight.

At her meeting with China's president, Mrs von der Leyen also complained, entirely reasonably, about the country's weak demand. If consumer confidence were higher or its budget deficit bigger, China's capacity utilisation would be healthier, regardless of subsidies. In such a world, Mr Xi would spend less time under fire from Europe's leaders, and more time enjoying the continent's mountains and lakes. ■

Vroom, vroom

China, passenger-car exports*, m



*12-month moving total

Sources: China Association of Automobile Manufacturers; Wind



Consumer spending

Talking shop

XUCHANG

What a wildly successful provincial grocer says about China's economy

ON A REGULAR Tuesday morning, a large crowd has gathered outside a grocery store in Xuchang, a city of 4m people. Visit Pangdonglai at the weekend and things are even busier. Thousands, some having travelled hundreds of kilometres, arrive before dawn to take their place in a queue that snakes back and forth in front of the store's entrance. At a time when China's ritziest shopping centres are often desolate, and the country's economy is struggling, the success of Pangdonglai's 13 outlets is captivating executives who want to understand consumer sentiment.

The latest economic data make the queues still more intriguing. Retail spending grew by just 3.1% in March year on year—well below expectations. In the same month, listed retail firms revised down their expected earnings by an average of 7%. In Shanghai, where per-person consumer spending is three times higher than in Pangdonglai's home province, high-end grocers are closing down. One such chain, CityShop, announced in April that it would shut its doors for good after 29 years. Pangdonglai's success contains lessons about both what may be needed to revive China's economy and the shape that such a revival might take.

What people are buying is plain to see. Shoppers clamber to fill trolleys with regular goods: fresh produce, pastries and local specialities, such as *menzi*, a steamed tapioca dish. Some grab stacks of a popular

► cake before it sells out. Customers have a variety of explanations as to why they have travelled to what appears to be a nice but unspectacular store. Many acclaim the service. Superior produce also helps: unsold fruit and vegetables are discarded after a day on shelves, shoppers say. Prices are not low but are considered fair. Several customers report being impressed by Pangdonglai's employment policies. The firm is said to pay more than three times the local average among industry peers and give staff at least 40 days off a year, an exceptional amount for China. Some may just appreciate the atmosphere. Amid squeaky-clean aisles, the words "Freedom & Love" are printed in bold lettering throughout.

Firms across China have been sending managers in "study groups" to Pangdonglai. One finding ought to be that Chinese consumers want more and more for their money. Analysts have been tracking growing discernment for years, and many have found low levels of trust as a result of years of food-safety scandals. Pangdonglai goes to great lengths to address concerns. It prints the margins it makes on some price tags and provides the names and phone numbers of the suppliers of many products. It also tests the level of pesticides on fruit and publishes the results. Investors note that publicising low margins on some products, while earning higher margins on others, is a wise strategy.

These quirks have helped Pangdonglai become an internet sensation. The ability to tap into a trend known as "special forces" tourism—where young people travel long distances to briefly visit a cheap attraction before heading home—is increasingly important in China. Thousands of videos of shoppers descending on Xuchang have circulated on social media. Even as national retail spending was lacklustre, travel to third- and fourth-tier cities shot up during this year's May Day festivities, as holiday-goers flocked to cheap places. As both a grocer and a travel destination, Pangdonglai probably benefited.

Perhaps the most profound aspect of the chain's rise is its part in a nascent consumer revival outside China's big cities. Although their economies lag behind coastal cities, inland towns are home to growing cohorts of young, affluent shoppers. Zhou Yangmin of Zhengzhou University recently noted that Pangdonglai's success reflects its decision to target affluent shoppers in a place with few other options. Spending on cosmetics, dining and sportswear seems to have fallen in China's largest cities in the final quarter of last year, according to a survey by UBS, a bank, whereas similar spending in smaller cities was either flat or growing. Until recently Xuchang was mainly known for the production of wigs made from human hair. Now it has a better claim to fame. ■

Funding fighting

Against the grain

Ukrainian farmers are using the cover of war to evade paying taxes

SINCE RUSSIA began its invasion in 2022, Ukraine's economy has shrunk by a quarter. But the ravages of war are not the only reason for the government's reduced tax take. Businesses are also making use of the chaos to dodge paying their fair share. This is particularly true in agriculture, which before the war was responsible for 40% or so of Ukraine's exports by income. The sector has been transformed by a scramble to find export routes safe from Russian attack. As Taras Kachka, Ukraine's deputy minister for agriculture, notes, this disturbance has provided plenty of opportunity for farmers to "optimise taxes".

Around 6.5m Ukrainians—or 15% of the country's pre-war population—have escaped the country, shrinking the domestic food market. At the same time, Russia is targeting transport infrastructure, grain silos and other agricultural equipment, which has driven up costs. Many workers have been recruited by the armed forces, and are at the front. "If you can drive a tractor, you can drive a tank," notes Mr Kachka. Farmers therefore not only have new opportunities to evade taxes, they are also increasingly desperate. The result is that two of every five tonnes of grain harvests now avoid contributing to state coffers, according to Mr Kachka's estimates.

Some of the "black grain" wrongdoing happens on a small scale. Perhaps a tenth of dubious trades are conducted via barter

and cash payments, for instance, which make it straightforward to hide transactions from the taxman. Another tactic takes advantage of the landmines and unexploded ordnance that are now scattered across parts of the Ukrainian countryside. Since land contaminated by explosives cannot be worked, farmers with safe fields have discovered they can stop reporting harvests without raising suspicions. Dmytro Kokhan of the Ukrainian Agri Council, a farming association, says that such tricks are limited to a fraction of farms in areas directly affected by fighting.

A bigger problem concerns the use of grain exports to escape capital controls. After Russia's invasion, these were made much stricter in order to prevent money fleeing the country, with the central bank setting a fixed exchange rate of 29 hryvnia to the dollar, which undervalued the currency by about a quarter. Farmers are able to falsify documents to pretend that the grain they are selling is of a legitimate, tax-paying variety or to understate revenues when selling abroad, before keeping the proceeds in a foreign bank. Sometimes they also sell grain at a low price to a foreign organisation that is in cahoots with them, or secretly under their control, and often based in Turkey or Romania. Proceeds from such sales are returned to Ukraine, but cash from a subsequent, higher-price sale to another firm is not. ►►



On the lookout for "ordnance"

► Crooked financiers, serving as middlemen, handle the logistics for a cut—often around 2% of profits. Companies established to hold profits are then shut down before deadlines for currency repatriation arrive. Some are registered to a “homeless guy who doesn’t even know that he was director of a company”, says Yurii Gaidai of the Centre for Economic Strategy, a think-tank. Although such manoeuvres are not entirely new, use of them has soared. Maryan Zablotsky, a parliamentarian who has investigated the matter, reckons that in the past two years more than \$3bn has escaped the country via black grain, with other estimates suggesting the figure may be even higher. Over the previous eight years, the total figure was probably \$4bn.

One official at the Economic Security Bureau of Ukraine, an investigative body, says its efforts to “de-shadow the econ-

omy” include analysing data to find suspect shipments and improving information-sharing between its detectives and customs authorities. All told, the ESBUR has investigated more than 1,300 agricultural firms in the past two years. Meanwhile, the government is easing capital controls, including by improving the exchange rate on offer, in order to limit the attractiveness of parking earnings abroad. These measures are popular both with the wider Ukrainian population, which sees tax-dodging as a betrayal of a cash-strapped motherland, and farmers playing by the rules, who complain that black grain pushes down prices. They also help Ukraine’s case when it goes to allies asking for more financial support. Tax receipts have begun to creep up as the changes take effect—but there is a long way to go before the crackdown can be judged a success. ■

Commodities

Bitter prospects

Why the global cocoa market is melting down

BARRY CALLEBAUT, the world’s largest maker of bulk chocolate, is full of beans. Its share price has jumped by 20% since April, when it reported higher sales volumes despite a steep rise in the cost of cocoa. Peter Feld, its boss, told investors not to worry about expensive ingredients: “What goes up fast comes down fast.”

The chocolatier may have to eat his words. This season, for the third year in a row, cocoa supply is expected to fall short of demand—by 8.5% of global production. Next year another deficit looms. The result is a chaotic market. In the month to April 19th the price of the most popular cocoa contract rose by 50%, to nearly \$12,000 a tonne, a record. Ten days later rain in drought-hit western Africa, home to four-fifths of the global crop, sparked the biggest-ever intraday price fall. Prices are still triple their level of a year ago (see chart).

The chaos is partly rooted in short-term supply issues. After being battered by storms at the end of last year, cocoa trees in Ghana and Ivory Coast have faced heat-waves, which have encouraged black pod (a fungus) and swollen shoot (a virus) to proliferate, further hurting yields. Ivory Coast’s mid-crop harvest, which runs from April to September, could be more than a third smaller than last year’s. Ghana’s could be the most miserable in 20 years.

This bad luck adds to chronic problems. Cocoa farmers in Ghana and Ivory Coast, most of whom own little land, get

paid a price set by the government that is too low for them to invest in fertilisers, pesticides and new plants. Many of their trees are old and unproductive. Fixed “farm-gate” prices also make growers insensitive to higher prices, meaning that shortages endure. In some places, beans are being smuggled into neighbouring countries with free markets. Increasingly farmers decide to quit altogether, preferring to bet on more lucrative crops such as rubber.

As a consequence, Ghana and Ivory Coast, from which traders buy contracts for deliveries at a later date, have not fulfilled orders worth hundreds of thousands of tonnes. Frustrated buyers are desperate to secure beans today, explaining another

oddity of the market: today’s price is nearly \$3,000 above that of a contract to deliver beans in May 2025, despite there being no end in sight to the current crunch.

This summer, as El Niño transitions to La Niña, more rainfall could arrive, bringing some relief to African plantations. Supply is rising elsewhere, too. Farmers in Ecuador, more exposed to global market prices, are quickly increasing production.

But that will make just a small dent in expected shortfalls. Crop diseases are tough to treat; new trees may take half a decade to bear fruit. And persuading farmers to plant them will be hard. Having raised the farmgate price in September, Ivory Coast’s government put up its price again in April for the mid-crop season. Ghana followed suit days later. Nevertheless, farmers still complain that prices are too low. Traders with outstanding contracts fear they will be asked to pay more when deliveries are made at last, because the two countries’ governments lack the money to cover the difference themselves.

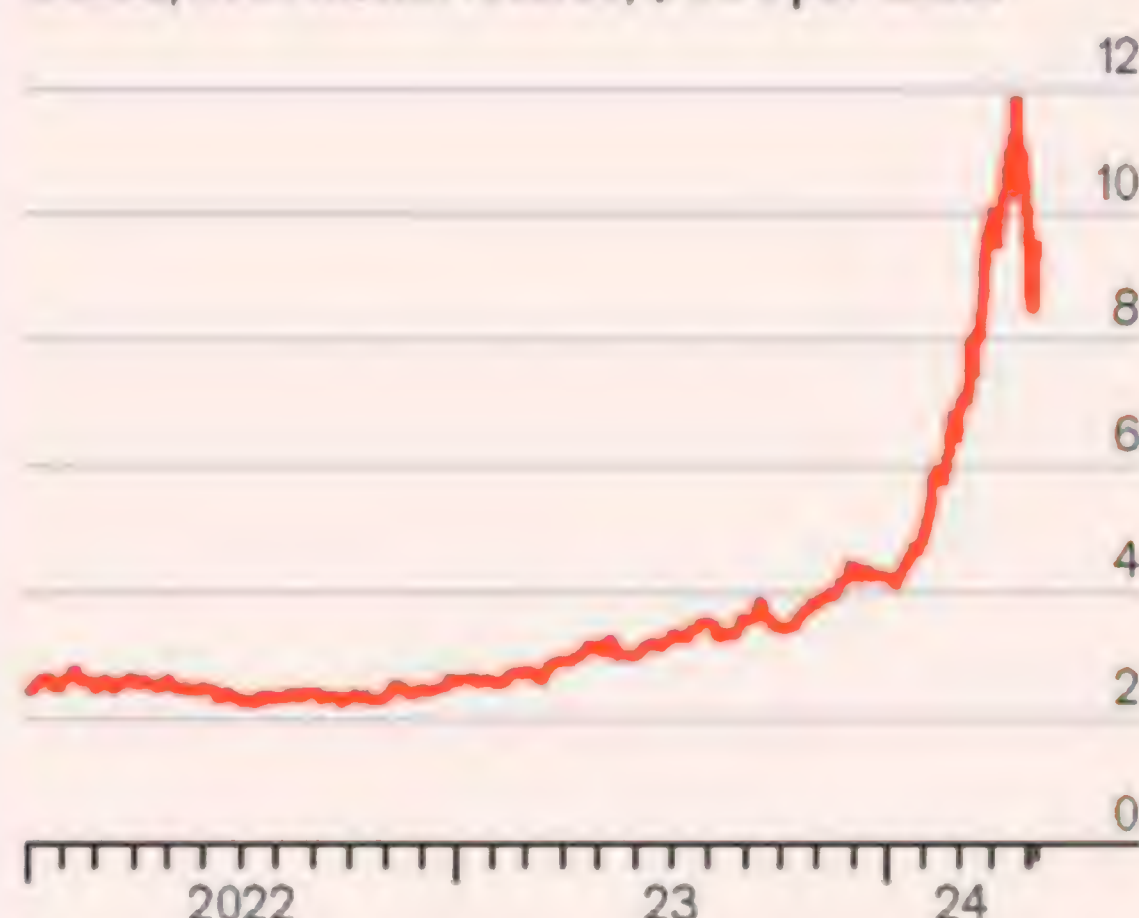
This lack of faith in the world’s largest producers has sapped liquidity in futures markets—another factor behind the recent madness. Unconvinced that new contracts will be honoured in full, traders are shunning them. Others are liquidating existing contracts because the New York bourse is asking traders to put down more money to back their positions. “Open interest” in cocoa futures (the number of outstanding contracts) has dropped from 330,000 in January to 150,000, the lowest in a decade. Market thinness means single trades can have an outsize impact on prices.

The icing on the chocolate cake is the uncertainty created by new regulation in Europe, the biggest consuming region. Under rules that will come into force at the end of the year, companies will be required to show that their beans have not come from deforested land, which will be difficult to prove in an industry that relies on smallholder farmers. This has pushed the premium the London contract commands over its New York peer to more than \$400 a tonne—a ten-fold increase in two months.

Until recently, many confectionery firms were well protected against rising prices. But hedges, which were mostly bought six to eight months ago, are beginning to expire, notes Paul Joules of Rabobank, a Dutch lender. As a result, companies are left with unpalatable choices. Some are reducing how much chocolate covers a candy bar, or launching fruit-based versions of their bestselling bonbons. Others are closing higher-cost factories in a bid to keep margins intact. Eventually, however, many will have to accept lower profits or pass on higher costs to the consumer, at the risk of destroying demand. For good or ill, the era of cheap chocolate may soon be over. ■

Hot chocolate

Cocoa, front month futures, \$’000 per tonne



Source: Bloomberg



Financial dealmaking

Bona fide

Against expectations, Europe's banks are thriving—and ripe for takeover

IN 2020, WHEN BBVA and Sabadell abandoned merger discussions, it was difficult to find investors with anything positive to say about European banks. A decade of near-zero interest rates, stiff regulation and anaemic economic growth had made them unprofitable and unattractive. The two Spanish lenders were no exception. BBVA had a market value of €26bn (\$32bn), less than 40% of its 2007 peak. At €2bn, Sabadell was worth only a fifth of the accounting ("book") value of its equity.

Their fortunes looked much brighter on May 6th when Sabadell rebuffed another approach from BBVA, which this time offered €12bn. Shares in Europe's big banks have risen by a fifth this year, more than

twice as much as the broader market (see chart 1). Lenders are less risky—capital ratios have risen, the proportion of bad loans on their balance-sheets has fallen—and much more profitable (see chart 2). Higher interest rates, which benefit banks by widening the spread between what they receive on assets (loans) and pay on liabilities (deposits), have lasted much longer than expected. For shareholders, the good news keeps coming. On May 7th UniCredit, Italy's second-biggest bank, reported a quarterly profit of €2.6bn, up 24% year-on-year. Its shares have soared by 46% this year. The same day UBS, a Swiss bank, announced its return to profitability a year after swallowing Credit Suisse.

On May 9th BBVA launched a hostile offer for Sabadell on the same terms the bank had already rejected. Whatever the outcome, its actions are likely to inspire others. Vows heard across the English Channel have also raised expectations. In March Nationwide, a British bank, agreed to pay £2.9bn (\$3.7bn) for Virgin Money, a rival. Enthusiasm among investors may encourage bank bosses to dust-off dealmaking plans. They will shed their doubts quickly, says Nicolas Véron, a financial-policy analyst. That was true last time European bank stocks were popular. In January 2004 Emilio Botín, then chairman of Santander, wrote in the *Financial Times* that he was "very sceptical" of large cross-border deals. By summer the Spanish bank

had agreed to buy Abbey National, a British one, kick-starting a merger wave that reached its peak three years later when a pan-European troika, including Santander, bought ABN AMRO, a Dutch lender.

During and after the global financial crisis of 2007-09, Europe's bankers struck deals with less fanfare as weaker players merged in home markets. Any dealmaking wave is now more likely to resemble this domestic consolidation than the cross-border takeovers pursued in the giddy pre-crisis era. "There has been a reappraisal of the economics of banking, and today dominating one market is much more attractive than being all over the place," notes Huw van Steenis of Oliver Wyman, a consultancy. Others suggest that the sorts of people running Europe's banks are simply too boring for cross-border takeovers. And when shares trade below their book value, buying them back is a high-return (and highly popular) way to spend healthy profits.

What might prompt more ambitious dealmaking? One catalyst could be progress on Europe's half-finished banking union. Creating a pan-European lender makes less sense without a true banking single market. Moreover, the relationship between governments and their biggest domestic lenders is still too close for comfort. The absence of a shared deposit-insurance scheme, which would involve European authorities guaranteeing customers' deposits, is an obstacle to a more integrated and competitive banking system. Joachim Nagel, president of Germany's central bank, recently advocated a "hybrid" insurance model, which would leave national deposit schemes in place but have them supplemented at a European level. Yet even this compromise is unlikely to be implemented soon.

Deals among local rivals face obstacles, too. When interest rates rise, the value of a bank's long-dated assets decline. These paper losses sting only when assets are sold in a panic, or when a bank is acquired, since accounting rules require the seller's balance-sheet to be marked to market. ▶▶

Credit where it's due

Stockmarket indices, January 4th 2021=100



Source: LSEG Workspace

*24 American banks

Many happy returns

Banks directly supervised by the ECB*, %



*Approximately 100 largest banks

*A measure of capital based on the riskiness of assets
Source: European Central Bank

► When UBS bought Credit Suisse in June, it wrote down the value of its former rival's book by \$15bn. At the end of 2023, unrealised losses on financial assets came to over €5bn at Sabadell. But there has been progress in this regard: paper losses are less of a problem than they were a year ago. Analysts at Barclays, a bank, say that during 2023 losses at Italian banks declined from 10% of the institutions' market value to 5%.

This has left plenty of banks looking ripe for deals. Of those tracked by the

Stoxx 600 banks index, nearly two-thirds are currently worth less than their book value. Four in ten are expected to return less than 12% on equity this year, making them seem cheap and suggesting they might do better as part of a bigger institution. Sabadell is one such bank. Deutsche Bank and Commerzbank, two German lenders which have long been tipped for a tie-up, are others. One more, ABN AMRO, remains a ward of the state, with the Dutch government the largest shareholder. The

Italian treasury's gradual exit from Monte dei Paschi, its oldest bank, also makes it a subject of frequent takeover speculation.

A bid by, or for, any one of these banks could set off a rush of deals, since fear of missing out is a powerful motivator. Perhaps bids will even emerge from beyond Europe. If the continent's bankers sit on their hands, foreign banks or private-equity funds may begin to circle. That would, at least, force Europe's banking bosses to the negotiating table. ■

BUTTONWOOD *Take-off*

It is once again a good time to labour on a bank's trading floor

WORKING ON A trading desk is perhaps the closest an office job can get to a sport. Focus and reflexes matter. On the other side of every trill of the phone or ding from a computer is a client who wants to trade. If ignored, they will hang up and call a competitor. Everyone is sweating, owing to the heat wafting up from stacks of computers whirring at capacity. On a busy day, it is impossible to leave the desk—making the job a feat of endurance. Just as sports teams use code to communicate their tactics, so do traders: “cable, a yard, mine, Geneva,” translates to “Brevan Howard, a hedge fund, is buying £1bn and selling dollars.” Mistakes cause swearing, shouting and sometimes the smashing of equipment.

Or at least that is how it was a couple of decades ago, in the good old days. Following the global financial crisis of 2007-09, life sapped from the trading floor. Stringent new rules curbed profits. High-frequency traders ate banks' lunches, especially in stockmarkets. For its part, the global economy was in a stupor, having been tranquillised by low interest rates. Markets moved linearly, with equities drifting up and bond yields slipping down. There were fireworks—the Brexit vote or the election of Donald Trump—but they were rare. This placid world provided investors with little reason to trade in and out of positions. Revenues were slim; returns sagged. Drama on trading floors featured layoffs, rather than market moves.

At long last, however, the good old days appear to have returned. Revenues from trading desks at Goldman Sachs, JPMorgan Chase and Morgan Stanley, three giant banks, leapt by around 40% between 2019 and 2020—and have remained at or above that level since. For

much of the 2010s global markets businesses barely returned their cost of capital. Now they post double-digit returns on equity. At Goldman, traders churned out a whopping 18% return on average common equity in the first quarter of 2024. At Morgan Stanley they posted 15%.

Until recently, bankers hemmed and hawed about this bonanza. Was it too good to be true? Mediocre returns had endured for such a long time that they had grown cautious about extrapolating from a good quarter, or even a good year. Of course, 2020, a banner year, was an aberration, the logic went—there was hardly going to be another pandemic. Then 2021 was just as good. On earnings calls in early 2022 bank bosses were cautious. “None of us could have anticipated the environment that we have lived through over the last two years,” said David Solomon of Goldman. “We in no way see that as a permanent environment that is going to continue at this pace.” Jeremy Barnum of JPMorgan talked of “normalisation”, followed by “modest growth”. But the chaos of 2022 was just as good for trading and markets

did not slow down in 2023. Stocks roared and bond yields collapsed in the final two months of the year. Given that expectations about central-bank policies are still swinging wildly, this year ought to end as another good one.

So did 2020 represent a structural change in the markets business of banks, rather than a blip? There is reason to think so. Among bankers, cautious optimism has replaced talk of normalisation. Asked if robust activity is the “new normal” for banks, Andy Morton, head of markets at Citigroup, responds that “it is hard to say, honestly, but there are some reasons to expect things will remain reasonably volatile”. That rates have climbed sharply, after the stasis of the previous decade, has been “a recipe for volatility”, he says. He also highlights rising geopolitical tensions and the growth of new industries, such as private credit, as reasons for elevated activity. Trends such as ageing populations and the climate transition might continue to stoke inflation, meaning continued interest-rate volatility. And all kinds of markets have ricocheted in recent years: not just bond and equity markets but also those for currencies and commodities, including European gas.

This leads to a striking conclusion. Perhaps ultra-loose monetary policy was more troublesome for banks than post-financial-crisis regulation. As is now clear, it is perfectly possible to make lots of money intermediating markets without committing the sins of the pre-2008 era—not least taking positions—so long as markets are sufficiently volatile. This kind of financial dynamism might not be welcome news to everyone. But it has undoubtedly made the job of trading markets as lucrative, and physically laborious, as in an earlier golden age.



FREE EXCHANGE

Shock tactics

Could America and its allies club together to weaken the dollar?



THE PLAZA HOTEL has New York glamour in spades. Sitting at a corner of Central Park, it was the setting for “Home Alone 2”, a film that came out in 1992 in which a child finds himself lost in the metropolis. He takes up residence in one of the hotel’s suites, thanks to his father’s credit card, and briefly lives a life of luxury. Donald Trump, the hotel’s owner at the time, has a walk-on part, which was the outcome of a hard bargain. According to the film’s director, he demanded to appear as a condition for giving the filmmakers access to the hotel. This was not the first deal in which the venue had played a part. Seven years earlier it hosted negotiators for the Plaza Accord, which was agreed on by America, Britain, France, Japan and West Germany, and aimed for a depreciation of the dollar against the yen and the Deutschmark.

Echoes of the period can be heard today. In the mid-1980s America was booming. Ronald Reagan’s tax cuts had led to a wide fiscal deficit and the Federal Reserve had raised interest rates to bring inflation to heel. As a consequence, the dollar soared. American policymakers worried about a loss of competitiveness to an up-and-coming Asian economy (Japan then, China today). The Plaza Accord was designed to address what officials saw as the persistent mispricing of the dollar. Robert Lighthizer, Mr Trump’s trade adviser, has mulled a repeat. The accord set a precedent for “significant negotiation between America’s allies to address unfair global practices”, he wrote in “No Trade is Free”, a book published last year. Mr Trump’s team is reportedly considering options to devalue the dollar if the former president returns to office.

Many of America’s allies would support an attempt to hammer the greenback. Asian officials worry about a strong dollar raising the cost of imported commodities, many of which are priced in the currency, as well as the expense for exporters who finance trade in it. In April Japan and South Korea released a statement along with the American Treasury, acknowledging “serious concerns....about the recent sharp depreciation of the Japanese yen and the Korean won”. More recently, Japan has seemingly spent tens of billions of dollars boosting its currency.

Could the Plaza Accord be a blueprint for a new era of collaboration? Economists are wary of currency intervention. In the pres-

ence of monetary policy that targets inflation, the textbook model says it should have little impact on the exchange rate. Differences in interest rates, perceptions of risk, and anticipated inflation and growth are what should drive capital flows between countries. A central bank that wants to stand in the way of the market must subordinate its inflation goal to defending the currency, lest it burn through its foreign-exchange reserves.

The Plaza Accord, though, represented a best case for intervention, as it was co-ordinated between several central banks and pushed markets in a direction in which they were already heading. The dollar had peaked in February 1985—more than half a year before the meeting at the Plaza Hotel. Jeffrey Frankel of Harvard University attributes its turnaround to the appointment of James Baker as treasury secretary that month. He mentioned the problem of the strong currency at his appointment hearing. The agreement at the Plaza Hotel was the capstone to fiscal- and monetary-policy changes already under way, providing a confirmation for currency traders that officials had shifted their focus. Today, by contrast, policy looks fixed. Persistent inflation has led the Federal Reserve to push back interest-rate cuts. Although shrinking America’s fiscal deficit would help address both inflation and the strong dollar, neither presidential candidate shows much keenness for the rectitude that would be required.

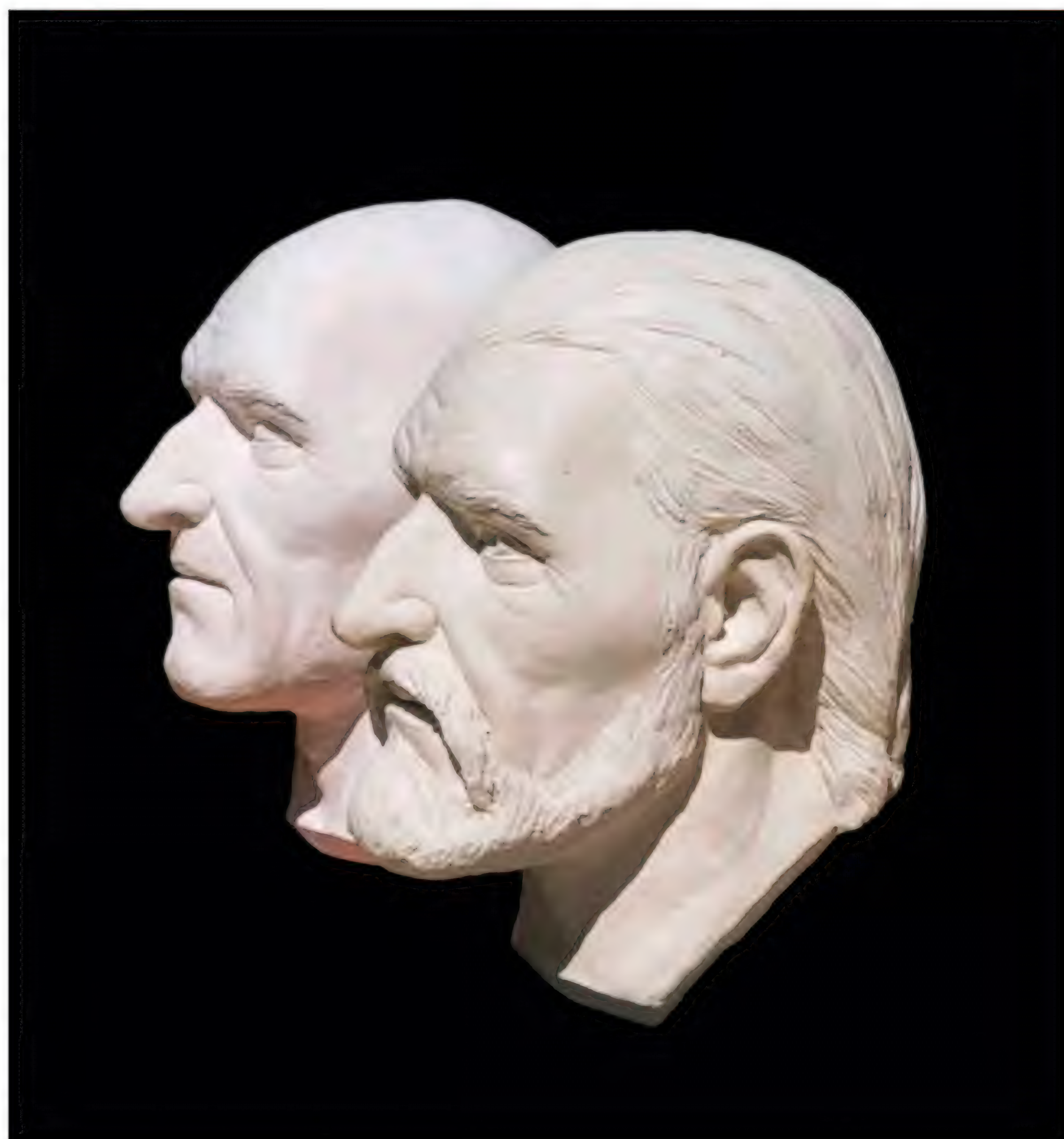
Perhaps Mr Trump could employ the tactic he used when securing a cameo in “Home Alone 2”: swapping access for a favour. Indeed, Mr Lighthizer has advocated something along these lines, suggesting that America could threaten to shut competitors out of its domestic market, much as it did when securing the Plaza Accord. Back then a growing trade deficit with Japan prompted a resurgence of American protectionism among the country’s politicians. One congressman remarked that “the Smoot-Hawley tariff itself would have passed overwhelmingly had it come to the floor”, referring to an infamous Depression-era tariff increase that set off a wave of retribution around the world. Bringing about a stronger yen through co-operation was seen as an alternative to tariffs on Japan: both would weaken the country’s exporters while supposedly strengthening America’s.

The art of the deal

It is hard to imagine a similar agreement with China today. America sees the country not just as an economic competitor, as it did Japan, but as a geopolitical threat. Tariffs are already high and a range of Chinese goods, from electric vehicles to social-media apps, face restrictions in American markets, often on the grounds of national security rather than economic protectionism.

Suppose, however, that America got its budget under control, reducing inflationary pressure as well as the need for counterbalancing inflows of foreign capital. Then it might be able to work with Asian allies, and persuade European ones, to strengthen their currencies against the dollar. Such a united front could put China in a difficult situation. Previously the country has responded to tariffs by devaluing the yuan. Research by Goldman Sachs, a bank, suggests that the Chinese government weakened the yuan by 0.7% for every increase in implied tariff revenue for America of \$10bn during the 2018-19 trade war. If the dollar was already falling, the Chinese government would have to choose between accepting the effects of the tariffs or starting a currency war that it might lose. Giving his rival such a dilemma would be an even better outcome for Mr Trump than a big-screen cameo. ■

Science & technology



Past lives

Found: the birthplace of the Yamnaya

BUDAPEST

The mysterious people transformed Europe and Asia. Archaeologists are closing in on how

MYKHAILIVKA, A VILLAGE on the right bank of the Dnieper river in Ukraine, lies dangerously close to the front line of Russia's war on its western neighbour. Seventy years ago it was the site of an excavation by Ukrainian archaeologists. There, they discovered one of the earliest known settlements of the Yamnaya culture.

The Yamnaya, who lived 5,000 years ago, are considered the world's first nomadic pastoralists. Having invented a way to subsist on the hostile Eurasian steppe, moving with their herds and the seasons, they expanded east and west with wagons, possibly riding horses, leaving barely a physical trace of themselves besides long lines of burial mounds, or kurgans. Yet they and their descendants would go on to

transform Europe and much of Asia genetically, culturally and linguistically. Among the many innovations these steppe migrants ushered in, scientists believe, are the Indo-European languages that are dominant in Europe today, and which are spoken by nearly half of humanity. But where this ancient culture was born has long been unknown.

Among the objects found by archaeologists at Mykhailivka in 1952 was a single

→ ALSO IN THIS SECTION

65 When wind turbines get too big

66 Next-generation crop-spraying

67 How to keep Moon-dwellers fit

human tooth. There was not much they could do with it at that time. But, in the past 20 years, new tools to extract and analyse ancient DNA have finally let scientists read the secrets hidden within the tooth, along with hundreds of other remains of Yamnaya herders. At a conference in Budapest in late April, a team of researchers shared some of those secrets, shedding light on the origins of these mysterious people and who their ancestors were.

The researchers described how the Yamnaya were born out of an ancestral population that formed on the steppe in the fourth millennium BC when multiple waves of migration and interbreeding brought genes originating in Caucasian, Siberian and European populations together. The team placed the herders' origins, quite precisely, between the lower reaches of the Dnieper and Don rivers, in the heart of a modern war zone.

For Alexey Nikitin, a Ukrainian-born palaeogeneticist at Grand Valley State University in Michigan and one of the leaders of the latest research, trying to identify the Yamnaya's origins had until now been like straining to make out a fantastical fresco in a dimly lit room. "All of a sudden, we've turned on the lights." This imagined fresco depicts the Bronze Age migrations initiated by the Yamnaya. These marked the second major transformation of Europe's population since the last ice age ended 10,000 years ago. (The first was caused by the arrival of farmers from the Near East 4,000 years earlier.)

Dr Nikitin's research was presented in Budapest as one of two preprints co-ordinated by David Reich, a palaeogeneticist at Harvard University, and his colleagues. The preprints, which have not yet been peer-reviewed, draw on the same data sets, share many authors and offer similar accounts, but differ in one striking respect: the Russian contributors are named on one paper, the Ukrainians on the other. Politically, it could not have been otherwise.

Geneticists had already shown, in two papers published in *Nature* in 2015, that the Yamnaya quickly expanded westward into Europe and eastward into Asia. Subsequent work has led to a completely new understanding of how they and their descendants succeeded in imposing their genes and languages on a territory that extended, eventually, from Ireland to the Altai Mountains of Central Asia. (The image above, the first facial reconstruction of a western Yamnaya, is based on remains found in Hungarian graves.)

Even after the Yamnaya were shown to have come to Europe, disagreement still lingered about how they had managed to drive such a dramatic turnover in the gene

► pool—replacing up to 90% of the indigenous farmers' genes in parts of the continent. Some researchers thought only violence could explain it, possibly even a genocide in which swathes of those farmers were wiped out. Over the past decade genetic and archaeological tools have provided finer resolution, bringing a radical rethink of what happened.

One of the most important realisations, articulated by Thomas Booth, a bioarchaeologist at the Francis Crick Institute in London, among others, has been that the same outcome could have been achieved by small waves of mainly peaceful immigrants, interbreeding with locals over generations and managing to keep their children alive to puberty. This model fits much better with what archaeologists find in Yamnaya graves: very few weapons, and a low incidence of traumatic injury.

The papers from 2015 spawned headlines asking if the Yamnaya were the most murderous people of all time. At the meeting in Budapest in April, Martin Furholt, an archaeologist at the University of Kiel, suggested, provocatively, that they might actually have been "peace-loving hippies".

Most experts would settle for something in between. One outstanding question concerns exactly who came west. Some have argued that the pioneers, at least, were overwhelmingly male—which conjures marauding warbands and violence. Dr Reich thinks it possible that there was no sex bias, in which case whole families may have come, and in peace. Other factors might have facilitated the Yamnaya's success. Kristian Kristiansen, an archaeologist, who works with Eske Willerslev's palaeogenetics group at the University of Copenhagen, thinks a deadly form of plague may have already been present in Europe before they arrived. The disease may have devastated farming communities, liberating pasturelands and clearing a path for the newcomers.

But if Europe's last great transformation came about slowly, perhaps even imperceptibly, that has other implications. By the time the Yamnaya moved on from what is now Hungary, leaving the steppe for Europe's temperate forests, they were no longer Yamnaya. Those migrants carried Yamnaya genes, but by now these were mixed with those of the indigenous farmers. Their culture had changed too, borrowing from local ones, and the blending continued as they moved west, until finally, around 4,500 years ago, the Yamnaya's genetic signature showed up in the British Isles. Their descendants had expanded as far as they could, and in just a couple of centuries. "It was a proper revolution," says Volker Heyd, an archaeologist at the University of Helsinki in Finland, one of the Budapest meeting's organisers. It just was not as violent as was once thought.

Most European men alive today carry Y chromosomes that were brought in by the Yamnaya migrants of the Bronze Age, a legacy of the privileged access the latter managed to obtain, by fair means or foul, to local women. Millions of men in Central and South Asia carry the same Y chromosomes, since the Yamnaya expanded eastward too. In January Dr Willerslev's group reported that a genetic predisposition to multiple sclerosis, an inflammatory disease of the central nervous system, arrived in Europe with the Yamnaya, and spread wherever their descendants did. It may have arisen as part of a package of immune changes that evolved in steppe herders, who lived close to their animals, to protect them against diseases of animal origin—including plague. In a modern context, it causes a different kind of disease.

Similarly, ancient DNA indicates that genes promoting lactose tolerance, the ability to drink milk without digestive malaise, became more prevalent in Europe after the Bronze Age migrations brought dairying practices with them. The Yamnaya themselves were probably not lactose-tolerant, even though milk was central to their diet. They are thought to have consumed it in fermented form, as cheese or yogurt, unknowingly recruiting the bacteria that drive fermentation to break down the lactose for them. But once milk became plentiful, lactose tolerance became advantageous, and the trait's prevalence increased in their descendants. More of them could drink their milk raw.

What of the Indo-European languages? Language, like culture, does not require mass migration to spread, but as David Anthony, an archaeologist at Hartwick College in New York, explained, painstaking reconstructions of the vocabulary of early Indo-European languages, based on comparisons of their living descendants, indicate that their speakers knew wheeled transport, practised dairying and possibly rode horses. That constrains when and where they could have lived, and Dr Anthony finds the Yamnaya to be the best fit. Many are now convinced they spread these languages throughout the Old World.

They probably did not speak the first Indo-European language, however. Dr Reich's group is not alone in thinking that would have been spoken closer to the Caucasus Mountains, reaching Yamnaya territory with those early waves of migration. The older language, and its speakers, remain dimly lit. But as far as the Yamnaya are concerned, Dr Nikitin thinks that the broad strokes of their story are now in place. The timing of the findings may be grimly fortuitous. For the foreseeable future, the ground near Mykhailivka will yield bullets and landmines more readily than more ancient evidence of the extraordinary Yamnaya culture. ■

Green energy

Blade runners

Today's biggest wind turbines need new forms of transport

IN RECENT YEARS the manufacture of blades for wind turbines has undergone a revolution, as it were. Two decades ago lengths of 40 metres or so were an achievement. Thanks largely to lighter and stronger carbon-fibre composites, the state of the art is now triple that. As turbine output is proportional to the square of blade length, this has also increased how much power can be produced. The biggest turbines in 2004 could generate about two megawatts. Today's giants can exceed 15.

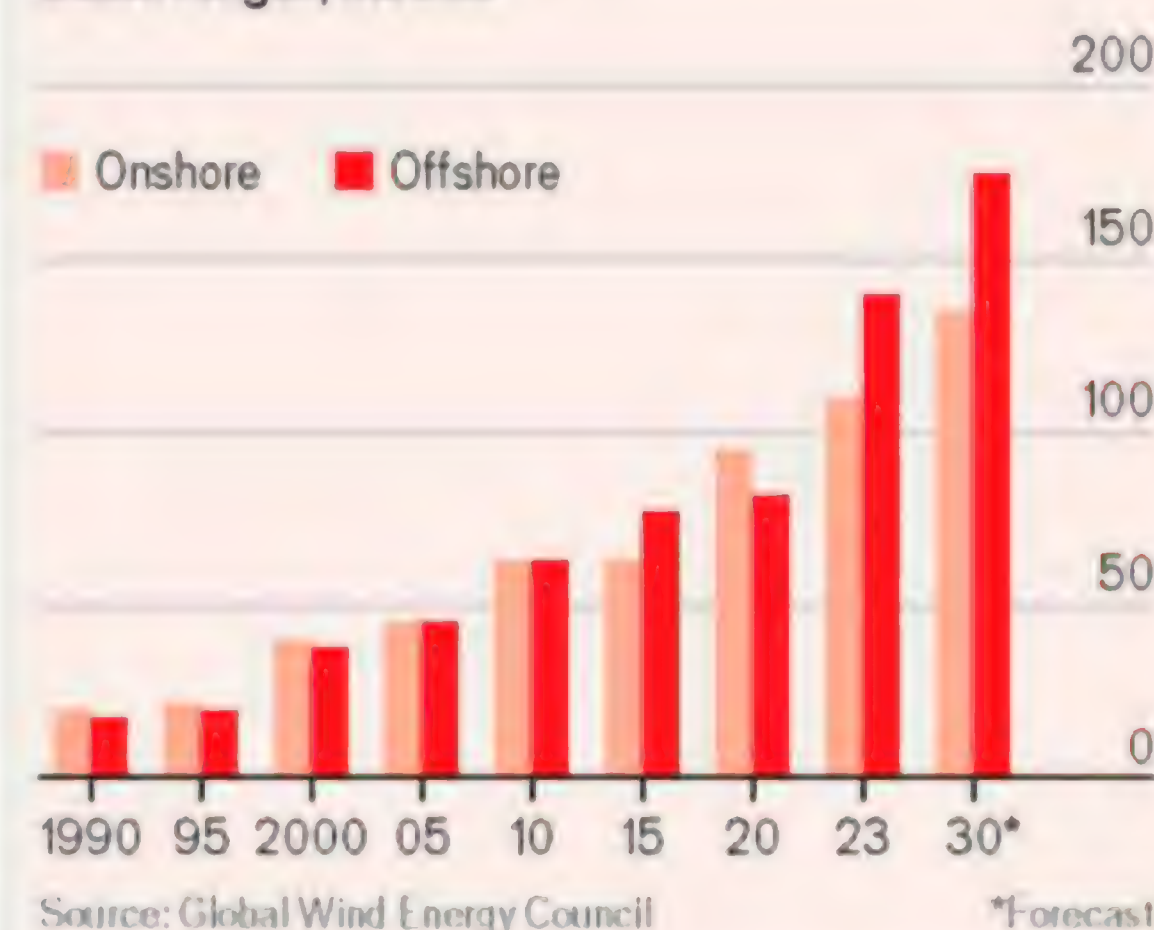
But there's a hitch. Today's longest blades have become too big to be delivered to inland wind farms. They can be taken only by ship to offshore sites, where building costs are far higher.

Logistics specialists have consequently been raising their game. Lorries with "blade-lifter" hydraulics can rotate their cargo to reduce lateral displacement on turns, a useful trick in hilly terrain without overhead obstacles. The past decade has also seen the development of highly accurate "swept path analysis" software. Fed with a digital model of a transport corridor, tree branches included, the software reveals—to within a few centimetres—if a blade could get through.

For all that, problems still arise. During the many months it can take to secure transport permits, trees grow and new obstacles are often erected. Manufacturing the blades in segments that can then be assembled on site, as is done with the turbine towers themselves, has thus far proved impractical, says Zhao Feng of the Global Wind Energy Council, an industry body based in Lisbon. In addition to introducing potential failure points, the joints are ex- ►►

Jolly green giants

Global wind turbines, maximum blade length, metres



► pensive and heavy. They also reduce wind-harnessing surface area by about 15%.

One idea is to 3D-print blades at wind farms. Orbital Composites, a Silicon Valley firm, has \$1.3m in funding from America's Department of Energy to print a prototype nine-metre blade later this year. If all goes well, the company hopes to produce a 50-metre blade in late 2025. 3D-printed blades of 100 metres could follow by 2028. Amolak Badesha, Orbital's boss, reckons on-site printing would cut developers' total cost for blades by a quarter.

Wilder projects are getting off the ground. A handful of firms are designing helium airships to lift blades. One is Aeros, an airship-maker in Los Angeles whose customers include America's Department of Defence. Within three years Aeros aims to operate a fleet of 169-metre-long airships able to carry 66 tonnes—enough for three 85-metre blades.

Successfully delivering the blade is only half the battle: engineers also need to stop airships from rapidly rising once the cargo is set down. The simplest solution, releasing helium, is prohibitively expensive: the gas can cost more than \$10 per cubic metre, and roughly 60,000m³ would need to be released on each trip. Aeros's work-around involves compressing its on-board helium before filling the remaining hold space with compressed air sucked in from outside. The increased mass would be enough to keep the airship stable. A French competitor, Flying Whales, plans to replace helium with water at journey's end.

Aeros's founder, Igor Pasternak, is coy about the project's costs, but he describes blade delivery as a "unique and lucrative market". Fees for moving a large blade can exceed \$370,000, so airlift three, he says, and it's "one day, \$1m". Not everyone, however, believes giant dirigibles equipped with massive blades will be able to manoeuvre safely in windy areas.

That is one reason why Radia, a firm based in Colorado, has opted to build a monster aeroplane instead. Dubbed WindRunner, it is designed to carry a 105-metre blade in a cargo bay nearly 12 times larger than that of a Boeing 747. The WindRunner fleet would land at wind farms on a strip of packed earth 1,800 metres long (shorter than most runways for commercial airliners) which Mark Lundstrom, Radia's chief executive, describes as "essentially a higher-quality access road".

Radia says it is more than halfway through an eight-year process to get its beast built and certified. Like Aeros, Radia is keeping mum on its costs but spies an enormous opportunity. The windpower industry spends an astonishing 7% or so of its capital expenditures on moving blades, Mr Lundstrom says. Even expensive, long-shot bids to find a better way, then, could prove worth the effort. ■



Agricultural pollution

Mist a spot

New crop-spraying technologies promise huge reductions in pesticide use

THE WORLD is awash in pesticides. Fully 3m tonnes are thought to be sprayed onto crops worldwide every year, of which only a small fraction are needed. The excess chemicals are known to run off onto increasingly fragile land and seep into watercourses, with damaging environmental and health effects. The use of agrochemicals continues to grow: global sales of pesticides rose to \$79bn in 2022, according to S&P Global Commodity Insights, part of a big research group. That trend could change. A number of new spraying methods employing artificial intelligence (AI) are being commercialised, promising to cut the amount of pesticides a farmer needs to spray by a colossal 90%.

The agricultural industry has already made some progress in reducing overspray. A variety of different additives, called adjuvants, can be mixed into the chemical tank of a sprayer. These adjuvants do not contain any active spray ingredients but consist of other chemicals, such as surfactants, emulsifiers and oils, which can improve the ability of a spray to remain on and penetrate leaves. Some crop sprayers are also fitted with systems borrowed from the paint-spraying processes used in car factories. These create an electrostatic charge on droplets to enhance the way they stick to foliage, although some farmers think it works better on cars than plants.

Precision spraying, though, is the future. This where AI algorithms come in. For

instance, Dyson Farming, an agricultural venture led by James Dyson, a British technology entrepreneur, is using a process developed by Bilberry, a French company. This involves an array of cameras spread along the long booms of an agricultural sprayer. The pictures captured by the cameras are analysed with image-recognition software trained to recognise weeds. (Green-on-brown detection, which spots the green chlorophyll in growing plants, has been around for a while. Bilberry's process also detects trickier green-on-green). The system then individually turns the booms' 144 spray nozzles on or off whenever a dose of herbicide needs to be applied.

Dyson first used this technique to treat wheat, and is now spraying other crops including oilseed rape (known as canola in America), maize and potatoes. The company reckons it is seeing a reduction of 70-90% in herbicide use.

Thoughts and sprayers

John Deere, a giant American agricultural-equipment producer, has come up with a rival camera-based system it calls See & Spray. It, too, uses machine learning to distinguish weeds from crops within milliseconds and adjust the spray pattern accordingly. It can, the company claims, reduce the airborne drift of chemicals by up to 87% and chemical run-off by up to 93%. In trials on corn, soyabeans and cotton in Illinois, Iowa, Mississippi and Texas, John

► Deere reports a nearly two-thirds reduction in the use of chemicals.

Even greater levels of precision spraying are promised by AgZen, a firm spun out of the Massachusetts Institute of Technology. Its system works not just for herbicides but also for fungicides and insecticides, which represent about half the pesticide market and which tend to be sprayed all over a field to cover the entire crop. The company was set up by Kripa Varanasi and Vishnu Jayaprakash in 2020 to commercialise a new type of spray nozzle. The problem, says Dr Varanasi, an expert in the behaviour of liquids, was that they needed to compare the performance of their nozzle with that of existing techniques. As such data hardly existed, they set about collecting it themselves.

Having grown up on a small farm in India, Dr Jayaprakash is well versed in using a backpack sprayer. He says it is extremely difficult to know if any treatment has been successfully applied. The trouble is farmers have too many variables to consider when setting up a sprayer, from deciding on the chemical composition of the mixture through to measuring the temperature, humidity and the age of the plants—all while deciding the best speed at which to drive the tractor.

To cut through the noise, the team came up with a monitoring system called RealCoverage, which has now been launched as a product in its own right. Capable of being retrofitted to existing sprayers, RealCoverage consists of two camera-based sensors on each spray boom arm, one placed slightly ahead and the other just behind. As the sprayer moves along, the firm's algorithms identify images of leaves captured by the first camera and compare them to images obtained by the second. This allows the number of droplets left clinging to the leaves to be calculated.

The algorithms also take account of many external factors, such as weather conditions, to compute how effective the spray will be. The results are shown in real-time on a display in the driver's cab, giving a simple percentage of spray success. The AI model can also suggest how things might be improved, so the driver can adjust the nozzles, raise or lower the boom or drive a bit faster or slower to achieve better coverage. At the end of the day, a digital map showing how the field was sprayed is produced, which can later be compared with how crops eventually flourish.

All this provides a huge increase in the depth of knowledge available to farmers, essentially allowing them to measure spray results in terms of millilitres per leaf, instead of litres per hectare. The firm says trials on farms in America and Europe allowed farmers to save 30-50% of their chemical costs. As the system also works in conjunction with other spray technologies,

Lunar life

Satellite exercise

To stay fit in low gravity, future Moon-dwellers may need customised workouts

MOTORCYCLISTS SEEKING to cement their reputation as daredevils could do worse than book a session on a Wall of Death. These are small circular velodromes where the track, instead of being lightly raked, is completely vertical. Viewed from above, the effect is of riders zooming around the inside of a washing machine.

What drives these brave souls up the wall is their speed. At around 50kph, the forces acting on them are strong enough to counterbalance gravity's pull, and keep them pushed outward.

Now a group of scientists have found another use for these contraptions: keeping future Moon-dwellers fit. In a paper in *Royal Society Open Science*, they propose that astronauts living on NASA's planned lunar base could run horizontally to prevent their bodies from wast-

ing away under the Moon's reduced gravitational pull.

In low-gravity environments, muscle atrophies, bone becomes brittle and fitness and motor skills deteriorate. Even exercise, rendered less effective by weightlessness, struggles to counteract such effects. Alberto Minetti from the University of Milan wondered if running in a Wall of Death—impossible on Earth—might provide a workout capable of limiting the body's decline. To test it he rented a 10-metre-wide Wall of Death and called in two brave volunteers.

His team strapped the volunteers, a man and a woman, to bungee rubber cords hanging from a crane above the track. The cords relieved the volunteers of five-sixths of their body weight, in effect mimicking the Moon's gravity. After some practice rounds, the volunteers could run parallel to the ground at speeds averaging around 20 kilometres per hour, without assistance.

Dr Minetti says such motion can generate a force on the body similar to the effect of gravity on Earth. According to his calculations, running this way may be enough to combat the withering effects of lunar life. NASA may not even need to find extra room: he suggests that if the lunar cabins for the Artemis Base Camp were built in a circular design, astronauts could simply go for a jog around the inside walls.

In principle it is "not a completely bonkers idea," says Kevin Fong, a doctor and specialist in space medicine at University College London. But, he adds, the limited medical care available in space means he would be nervous about astronauts running at speed. The name "Wall of Death", after all, is meant only to be a metaphor.



One giant leap forward

AgZen is discussing possible collaboration with equipment suppliers and contract-spraying businesses.

With RealCoverage now on the market, AgZen aims to launch its original idea next year. This is a unique spray nozzle called EnhanceCoverage. Instead of mixing adjuvants into the spray tank, these are put into a second container and injected into the nozzle as the droplets are formed. This has the effect of "cloaking" the droplets in additives, says Dr Varanasi, which results in

better adhesion to foliage. The new nozzle could further improve the spot-spraying of herbicides. However, says the firm, its broader benefit is that taken together with the measurement system it could reduce the total amount of fungicides and insecticides sprayed over complete crops by some 90%, as well as cutting the amount of adjuvants required. For farmers willing to try these new technologies, the possibility beckons of eliminating the most noxious pest of all: waste. ■

Culture



The art of deception

What's the deal?

PARIS

True tales of secrecy, opacity and outright thievery in art

All That Glitters. By Orlando Whitfield. Profile Books; 336 pages; £20. To be published in America by Pantheon in August; \$29
Get the Picture. By Bianca Bosker. Viking; 384 pages; \$29. Allen & Unwin; £20

IN 1989 LARRY GAGOSIAN, who has since become the world's most powerful art dealer, was asked whether there was anything he would like to see change in the art market. "That is like asking Dante what he would change about the structure of Hell," he replied, implying, a bit devilishly, that the way things were suited him.

It is an imperfect metaphor. Hell is much easier to access—and understand—than the art world. Secretive yet gossipy, illiquid yet always transactional, art is an industry that remains mysterious even to its active participants. Earlier this year the murkiness was spotlighted in an American courtroom after Dmitry Rybolovlev, a Russian billionaire, sued Sotheby's for fraud, alleging that the auction house had known

a Swiss art adviser was fleecing him whenever he bought masterpieces. He lost—these days juries are not especially sympathetic to Russian oligarchs—but the case drew attention to the often opaque practices of art's wheeler-dealers.

"The art market is like a stockmarket where all the shares and their owners are secret," explains Orlando Whitfield in "All That Glitters". Mr Whitfield spent years in the art business and watched as his friend and boss, Inigo Philbrick, became one of the most successful young contemporary-art dealers in London—and then one of the

most notorious. In 2022 Mr Philbrick was sentenced to seven years in prison, after pleading guilty to wire fraud. In total Mr Philbrick's scheme involved \$86m; the FBI has declared it the largest known art fraud in American history.

Mr Whitfield and Mr Philbrick met when they were students at Goldsmiths, University of London and tried to break into art dealing together. Mr Whitfield's father had been an auctioneer, while Mr Philbrick's was a museum director in Connecticut. (The painter Frank Stella was Mr Philbrick's sometime babysitter.) As students, they put together a few novice deals, at one point trying to buy a pair of doors and even a building's wall that Banksy, a popular street artist, had painted on.

Mr Philbrick scored a job with Jay Jopling, founder of White Cube, a prominent gallery in London, and impressed him. Mr Jopling tapped Mr Philbrick to start a new gallery and manage some personal art investments. This is where the perfect picture started to develop some cracks. Mr Philbrick would gain Mr Jopling's approval to buy a painting but would sometimes go above the agreed price because he wanted to close the deal; he would change the figures before emailing them to accountants.

Those were small sins, compared with what later transpired. Mr Philbrick ended up selling the same works to multiple people, lying to secure loans, faking documents and more, as he travelled around on

→ ALSO IN THIS SECTION

69 Want to live to 120?

70 Beethoven's ninth turns 200

71 World in a dish: Chillies in China

71 When Old Masters meet TikTok

72 Comic relief in America

private jets. “The manic complexity of Inigo’s scheme now seems to me analogous to the art market as a whole—deliberate, wilful obscurity as a *modus operandi*,” writes Mr Whitfield.

After Mr Philbrick fled to Vanuatu in the South Pacific, he sent Mr Whitfield documents from his transactions, hoping his friend and former colleague would collaborate on an article to tell Mr Philbrick’s side of the story. But soon Mr Whitfield realised these were the “Pentagon Papers of the art world” and decided to write his own story of what had transpired. “All That Glitters” is the result.

While Mr Whitfield shifted from art to writing, Bianca Bosker, a journalist, did the opposite and jumped from journalism into the art world. She worked at galleries, a painter’s studio and the Guggenheim Museum to understand and to chronicle the taste and buying habits that make the \$65bn art world hum. She had reported in China before, but “I’d had an easier time sniffing out answers in Chengdu than Chelsea,” she claims in “Get the Picture”.

Both books are like “Liar’s Poker”, but for art. Just as Michael Lewis drew back the curtain on the “big swinging dicks” of Wall Street trading floors in his memoir from 1989, these authors double as anthropologists, observing the peculiar social habits of art collectors and vendors. They recount how people rely on art dealers as personal concierges and social co-ordinators, and how, oddly, those who look at a lot of art rarely remark on it. “Discussing the art was like complimenting the crown mouldings at an orgy,” writes Ms Bosker. “I mean, you can—only it’s not why everyone’s there.”

The “financialisation” of art (what some call “speculecting”, a portmanteau of speculation and collecting) has been driving up prices for paintings since the 1990s. Practices that are illegal on Wall Street—trading on inside information, manipulating markets, lying to clients—are permissible in the art business. Interestingly, Mr Whitfield posits that more oversight of banks after the global financial crisis of 2007-09 encouraged some financiers to approach art-buying as an outlet for their risk-taking. “The best thing about the art market is that it’s completely unregulated. However, the worst thing about the art market is that it’s unregulated,” a trader at Goldman Sachs told Mr Whitfield.

At stake, beyond the million-dollar deals, are some bigger questions, like why people assign value to objects depending on who created them. Though he never actually purchased it, Mr Philbrick was paid to buy an artwork called “Untitled (Welcome)” for an Israeli-Canadian billionaire. The piece by Félix González-Torres was a sculpture of sorts, involving door mats. So when the buyer’s minion came to London, Mr Philbrick tried to recreate it. He bought

100 plastic mats from a hardware store and laid them on his gallery’s floor. “No amount of Diptyque room spray or frantic wafting of auction catalogues would fully banish the smell” of the new rubber, Mr Whitfield recalls, but it did not matter. The delegate saw what looked like the avant-garde work and checked it off his list.

There is also the question of harm. Is taking a few extra million dollars from millionaires such a big deal? Mr Philbrick may not think so. Recently released from prison several years early, he is posting photos of his ankle bracelet and life after prison with his wife (who featured on the reality-TV show “Made in Chelsea”) on Instagram. A documentary by the BBC about Mr Philbrick is forthcoming, and “All That Glitters” is being made into a show for HBO.

Some still predict that Mr Philbrick could make a comeback as a dealer. “Amer-

icans love second acts,” one high-flying art dealer tells your correspondent. He points to Jordan Belfort, known as “the Wolf of Wall Street”, who served a sentence for insider trading but has hatched a second career as a writer. (His latest book, “The Wolf of Investing” was published in 2023.) Michael Milken, the junk-bond king who was charged with securities fraud in 1989 but has reinvented himself as a philanthropist, holds his annual conference in Los Angeles; the bigwigs of global business and finance attend it each May.

Whether Mr Philbrick even wants to break back into the art world is a question only he can answer. There is ongoing legal wrangling over art works he sold, including a painting by Jean-Michel Basquiat, called “Humidity”. Fittingly, “Humidity” is a portrait of the artist Andy Warhol standing next to—who else?—his art dealer. ■

In pursuit of longevity

Death and a thousand nuts

What strategies actually work to fight dying?

Why We Die. By Venki Ramakrishnan. *William Morrow*; 320 pages; \$32.50. *Hodder Press*; £25

FOR MOST of human history, death has been a blunt fact of life. People died because they were eaten, had an accident or developed an infection. In 1950 global life expectancy was 46.5 years. But now that the world is richer and healthier, it is almost 72. Living longer exposes more people to the wear and tear of ageing. Unlike their ancestors, they spend little time dodging predators and worry instead about succumbing to dementia or simply to frailty.

In “Why We Die”, Dr Venki Ramakrishnan asks whether it is possible to arrest the decay of body and mind. A molecular biologist based in Britain, Dr Ramakrishnan won a Nobel prize in 2009 for his work on how cells generate the proteins that make up human bodies. As those cells accumulate chemical damage, for instance from toxins, they malfunction, and their inherent repair mechanisms deteriorate.

Though technical terms pepper his account, he has a jauntily accessible style. He likens a breakdown in vital proteins to an orchestra playing discordantly. When discussing how the energy-generating mitochondria in cells degrade over time, he pictures them “rusting from within”.

Is this decline inevitable? Dr Ramakrishnan notes that some species, such as

jellyfish, respond to injury or stress by rejuvenating themselves. Among mammals, the naked mole rat stands out, seemingly resistant to heart disease and cancer. Can humans learn the secrets of longevity from the mole rat—or from the hydra, a tiny aquatic creature capable of indefinite self-renewal? Scientists are trying.

The quest to cheat death has a long history. More than 2,000 years ago Qin Shi Huang, a Chinese emperor, directed a ▶▶



Long in the tooth, but ageing well

► team of envoys to seek the elixir of life. He died at 49, apparently killed by the very potions he dreamed would preserve him.

Only in the past 50 years have biologists fully grasped the processes that cause ageing. Scientists harness ever more sophisticated tools to manipulate cells and genes, and a new industry has sprung up. Some 700 biotech firms currently focus on ageing and longevity. Though they have achieved few advances, hype runs riot.

Dr Ramakrishnan takes a hard look at vogueish therapies. Not all of them draw criticism. He cites evidence for the benefits of limiting calorie intake, and cautiously reports the promise of rapamycin, a drug that produces the same effects without the need to restrict diet. But there are many “dubious” enterprises pushing “crackpot” ideas. He is especially critical of cryonics, a process that involves freezing people after death and defrosting them when cures for their ailments are found.

Also in the firing line are messianic figures who tout fantasies of eternal life. One, Aubrey de Grey, asserts that the first humans to live to 1,000 have already been born; he promotes what he calls “longevity escape velocity”, the idea that human beings can improve average life expectancy faster than they age and thus never die.

Prophets of immortality attract funding from plutocrats who treat life as yet another system that can be hacked. Bryan Johnson, a tech entrepreneur, has spent an estimated \$2m a year on his anti-ageing regimen, which until recently included blood transfusions from his teenage son (he has said these produced “no benefits”). Those who share his interest in anti-ageing research include Elon Musk, Jeff Bezos and Mark Zuckerberg: “When they were young, they wanted to be rich, and now that they’re rich, they want to be young,” writes Dr Ramakrishnan.

A wide gap in life expectancy still exists between rich and poor. The new science and business of longevity threaten to increase it. Dr Ramakrishnan is uncomfortable about this. By 2050 there will be 2bn people who are over 60, reckons the World Health Organisation. He predicts mounting problems: overpopulation, dwindling natural resources and fewer workers to support a growing cohort of pensioners.

In the end he offers conservative advice. If you aspire to a long, healthy life, you should sleep well, exercise and eat moderately, consuming mainly plants. For those who favour bolder interventions, he has a simple message: “Even if we conquer ageing, we will die of...wars, viral pandemics or environmental catastrophes.”

Boosting your lifespan may beguile the imagination but could rob your existence of meaning, because there is no urgency to make every day count. Perhaps, after all, life’s transience is the key to its beauty. ■

Beethoven’s ninth turns 200

Something for everyone

The symphony is among the most famous—and versatile—works of music

LUDWIG VAN BEETHOVEN’S ninth and final symphony was first performed on May 7th 1824 at Kärntnertor Theatre in Vienna. By then deaf, the composer took to the stage for the first time in 12 years to help conduct it, to a thunderous ovation. Since then, the roughly 70-minute symphony—and in particular its triumphant choral finale, “Ode to Joy”—has been admired by all kinds of audiences: left and right, democrats and totalitarians, capitalists and communists.

In Nazi Germany, “Ode to Joy” was trotted out each year to celebrate Adolf Hitler’s birthday. Josef Stalin ordered it played in every Soviet village. The symphony was performed for the tenth anniversary of Mao Zedong’s victory in the Chinese civil war in 1949, and in 1974 the white-supremacist regime of Rhodesia made “Ode to Joy” its anthem.

European liberals have claimed it, too, including Emmanuel Macron in France and Sir Keir Starmer, the leader of the Labour Party in Britain. The Council of Europe adopted the “Ode” as its official anthem in 1972—in an arrangement by Herbert von Karajan, a conductor who had joined the Nazi party in the 1930s (to protect his career, he later insisted).

In July the Ukrainian Freedom Orchestra, a group of refugees and Ukrainian members of other orchestras, will embark on a “Beethoven Ninth Freedom Tour”,



Master of the musicverse

visiting democratic capitals, including Paris and Washington. In their version, “joy” is changed to “glory” (*slava*), echoing Ukraine’s rallying cry for victory over its Russian invaders.

Beethoven wrote during the hard-won peace after the bloody Napoleonic wars. Though sometimes critical of the Austrian emperor Francis I, he supported the Austrian Empire, and the ninth symphony can be interpreted as a tribute to the security it provided. It expresses a belief that arose during the Enlightenment: that music should be accessible and universal in style.

For more than 30 years Beethoven had been considering setting a poem by Friedrich Schiller to music, and it is no wonder he was drawn to the text. Schiller imagines collective transcendence through song, in which “all men shall be brothers” in a “chorus of jubilation”. The spirit of this symphony is triumphant. In the original performance of May 1824, a patriotic overture and movements from Beethoven’s “Missa Solemnis” (Solemn Mass), written to celebrate an archbishop, were played alongside the ninth symphony.

Beethoven was calculating when it came to flattering the powerful, but also interested in current events. He “supported the ideals of the French revolution” but not the guillotine-happy Terror that followed, says Harvey Sachs, author of “The Ninth”, a book about the composer. He originally dedicated his third symphony to Napoleon as “the heir of the French revolution”. But he scrapped that dedication in 1804, after the great man named himself emperor of France, betraying the revolutionary values he had once espoused.

The music itself is revolutionary. It begins with a misty disorganisation, and later explodes into what was a musical novelty at the time: a symphony orchestra accompanied by four vocal soloists and a chorus belting out a version of Schiller’s poem. It is easy to forget how bold this choice was, says Laura Tunbridge, a professor of music at Oxford University, though “People weren’t entirely convinced by it.” Beethoven considered eliminating the chorus from the piece, and the European anthem notably ditches the words.

It is this boldness—and the language of brotherhood, joy and freedom—that has appealed both to democrats and to despots so often. “People like the Nazis or the Rhodesians have claimed the ninth for reasons that were not essentially different from the reasons people associated with democracy,” says Esteban Buch, author of “Beethoven’s Ninth”. Political leaders, in other words, may have different notions of the world but have tried to use communal singing and music to build patriotism. Though the symphony may have historical baggage, to many it still remains simply a joy. ■



World in a dish

Coming in hot

How the once-derided chilli pepper revolutionised Chinese palates

TIANSHUI, A CITY tucked away in China's north-western hills, does not normally make headline news. But a fiery soup that owes its unique flavour to locally grown Gangu chillies has lit up the internet. Since March, the hashtag #Tianshui-Malatang, referring to a popular type of street food, has racked up more than 140m views on Weibo, a social-media platform. Millions have flocked to the city to try it themselves. A local chef was caught on tape looking so miserable at work that local authorities had to give him a talking-to so that he remembered to smile.

Increasingly the Chinese palette is craving spice. Last year Meituan, China's biggest food-delivery app, reported that nearly 80% of restaurants now offer spicy fare, a taste known as *la* in Chinese. Look back a few hundred years, though, and chillies were nowhere to be found.

Unlike ginger and Sichuan peppers, which are native to the region and widely used, chilli peppers were brought to China from the Americas by Portuguese and Dutch explorers only in the 16th century. At first, nobody ate them. For at least 50 years, they were grown as decorative plants, prized for their cheerfully bright colour and tiny white flowers, and occasionally used as medicinal herbs.

During China's last imperial period, a stringent system that taxed salt forced peasants in Guizhou province to look for an alternative to the condiment. They

chose chillies, which produce several crops a year and take up little land. From there, a new flavour was unlocked. The pepper steadily spread to other rural regions of China, but its pungent, overpowering flavour barred it from getting near the tables of imperial or upper-class families. For a long time, *la* was used to describe vicious-natured people, and the few urbanites who enjoyed chillies did not trumpet their taste.

But the Communist revolution revolutionised the kitchen. The chefs of nobles were out of favour, and their traditions discontinued. The new leader, Mao Zedong, was the son of a peasant and a fan of chillies. Mao made Russian envoys eat sweat-inducing dishes and laughed when they could not handle the heat. "You can't be a revolutionary if you don't eat chillies," he said. What was once a poor man's food became a symbol of China's working class.

Industrialisation after Mao created the largest migration in human history. Hundreds of millions of migrants poured into big cities, bringing with them the spicy flavours of home. Chillies are now incorporated into street food, fine dining and snacks in regions with little tradition of heat.

Cao Yu, a food writer and author of "The History of Eating *La*", argues that part of the chilli's charm also comes from its social function. "If we've had spicy food together, we've endured pain together," he says. "It's just like drinking, it brings us closer to one another." ■

When Old Masters meet TikTok

Playing to the gallery

How the National Gallery, in its 200 years, has mirrored Britain

SOMETIMES A LITTLE geopolitical rivalry can produce a big pay-off. France opened the Louvre in 1793. The Netherlands followed with what is now known as the Rijksmuseum, then Spain with the Prado. Britain had flirted with the idea of a national collection of art since the 1770s but did not make a move until 1824.

Unlike in France and Spain, the British royal family would not hand over its beloved paintings. So the government decided to purchase 38, many of them Old Masters, from John Julius Angerstein, an insurance broker, for £57,000 (roughly \$6.5m in today's money). As one MP proclaimed, Britain had finally been rescued "from a disgrace which the want of such an establishment had long entailed upon it".

The National Gallery opened its doors to the public 200 years ago. In that time it has moved from Angerstein's home on Pall Mall in London to its commanding spot overlooking Trafalgar Square. Before the pandemic it was the seventh-most-visited museum in the world; 6m people came to see its collection of more than 2,300 treasures. (As it struggled to recover from a covid-induced slump and renovates a major wing, it slid to 12th place last year.)

All the same, the birthday celebration, which starts on May 10th, is a chance to show off. The festivities include a year of exhibitions, performances and workshops, and 12 of the gallery's best-known paintings—by J.M.W. Turner, Johannes Vermeer and others—will go on display across Britain. "We take the word 'national' really seriously in the phrase 'National Gallery'," says the deputy director, Paul Gray.

From the outset, it was to be a people's museum—a mantra that has been reinterpreted over time. At first that meant a free place where the public could come to marvel at masterworks from across western Europe. During the Victorian era people believed the gallery was a civilising alternative to the gin palace and the public house and hoped great paintings would boost creativity and power the economy.

It became a mirror in which Britain could see itself, for better or worse. When Mary Richardson, a suffragette, slashed Diego Velázquez's "The Rokeby Venus"—a sensuous nude painting of the goddess—she was calling attention to the persecution of her fellow activist, Emmeline Pankhurst. During the second world war the National Gallery embodied the Blitz spirit. ►►

► The paintings had been evacuated to a disused quarry in Wales but the museum continued to host concerts and talks. In a display of defiance, masterpieces were smuggled back for people to enjoy.

After the war strict, paternalistic ideas about art institutions—including that food and drink should not be served on site—shifted. In 2022-23 refreshments, combined with events and merchandise, made a profit of £2m, or \$2.5m. Of late the gallery has improved its digital efforts in order to “go where people are”, as Christine Riding, head of the curatorial department, puts it. It posts regularly on TikTok. For the bicentenary, 20 influencers will make social-media content inspired by the gallery.

This points to the future of museums. Alongside a world-class collection, institutions need to offer a cradle-to-grave experience. That means sensory classes for babies, parties for adults and lectures that cater to older folk. All this is expensive: in 2022-23 expenditure was around £60m. (The National Gallery receives government support but generates most of its income from donations and memberships.)

On a recent weekday the museum was a flurry of schoolchildren, teenagers and adults. The National Gallery may have started later than its rivals on the continent, but it is energetic in old age. ■

Comedy in America

No laughing matter

WASHINGTON, DC

Comedy on TV has become too safe. The internet hosts livelier acts

AT THE ANNUAL White House correspondents’ dinner comedians sing for their supper—and usually serve up a roast for dessert. Not this year. On April 27th Colin Jost, a host of “Saturday Night Live”, delivered a meek stand-up routine with some perfunctory barbs about the media and political elites, before thanking President Joe Biden for being “a decent man”.

This year ought to offer plenty of material to spin into laughs. The leading candidates for the presidential election in November are maladroit, elderly men prone to gaffes. But many of comedy’s most recognisable names are not taking advantage of the material, at least on TV.

Take, for example, late-night comedy, where monologues are sending audiences to sleep. Stephen Colbert, who made his name as a hilarious mock-conservative, often delivers earnest performances that sound like lectures fit for cable news. “Wow, I am actually surprised that Truth Social had value,” he recently said of

Donald Trump’s money-losing social-media business. In a flattering interview with Mr Biden in February, another comedian, Seth Meyers (pictured), cracked a few jokes, before dutifully informing his guest that “You have gotten things done.”

Perhaps they are burned from previous election cycles. Jimmy Fallon, who gently tussled Donald Trump’s hair on air two months before he won the election in 2016 (and was browbeaten into apologising for being so soft), offers a cautionary tale. But a more common problem may be sincerity: Mr Colbert, Mr Meyers and others believe that Mr Trump is a threat to democracy and that Mr Biden has been unfairly maligned. Why knock Mr Biden when the election is expected to be so close, the thinking goes, given the vile alternative? They still want to make their audiences laugh but subordinate humour to *politesse* out of a sense of responsibility.

An anomaly is Greg Gutfeld, host of Fox News’s comedy programme, “Gutfeld!”, which was the most viewed late-night programme in the first three months of this year. Mr Gutfeld and a rotating panel react to and satirise the news, with rants that are almost accidentally funny because of their incoherence. In a recent riff about Mr Trump’s trial in New York, Mr Gutfeld mused about the “time-honoured pledge” of being discreet about prostitution before mocking Trump Steaks (meat licensed by the former president) and making a crude joke about nude yoga.

A laughable divide has emerged between the establishment on TV and the comedic insurgents, who forge their careers online and take more risks. The most amusing humour is now found on social media, where successful comics still care more about whether a joke works than about its political consequences.

One of the most popular online comics is Shane Gillis. “Has enough time passed that we can admit that Trump was funny?” Mr Gillis asked in a comedy special in 2021 that has 27m views on YouTube. In his recent stand-up set, which spent two weeks on Netflix’s “top ten” list in America, Mr Gillis pines for a Trump-Biden presidential debate: “All I want to see is him debate...Trump’s whole thing is he tries to get in the other guy’s head, dude. Can’t get in Joe’s head. Joe’s not in there.”

Countless other comedians are building followings online with viral short videos, and popular podcast hosts like Joe Rogan have helped amplify their reach. These new comedians’ politics are unpredictable, though many find Robert F. Kennedy junior, who is running for president as an independent, appealing. Perhaps the primary unifying sensibility is their scepticism of the powerful—politicians, scientists, businessmen—and their willingness to find humour in anything. Sometimes the



No hot seats here

subject of their riffs is Mr Trump sharing his theory of how magnets work; other times it is Mr Biden being pumped with performance-enhancing drugs. Sam Morril, another rising star, has compared the election to a choice between a drunk driver and someone falling asleep at the wheel.

Many of the insurgents are now making good money, appearing on mainstream platforms and using their social-media fame to put on large, sold-out shows. For example Mr Gillis, who boasts some 3m fans across Instagram, YouTube and X, recently hosted “Saturday Night Live”; a scripted show starring the comedian will air on Netflix in May.

But the biggest stages still remain out of reach. In March Barack Obama, Bill Clinton and Mr Biden gathered for a fundraiser at Radio City Music Hall in New York. Mr Colbert served as a friendly moderator, mocking Mr Trump (“Do any of you have plans to sell golden sneakers?”) and asking anodyne questions about living in the White House (“Do you always feel like you’re in a museum?”). For many fans of comedy, traditionally America’s most transgressive artistic medium, it felt jarring to see such a fawning act.

Consider the correspondents’ dinner in 2006, when Mr Colbert delivered a searing critique of George W. Bush as he sat only a few feet away. The roast was so personal and intense—lambasting Mr Bush’s foreign policy and anti-intellectualism—that several Bush aides left in the middle of the act. It is hard to imagine a television host ever again being as harsh as Mr Colbert was nearly 20 years ago. And it is even harder to imagine late-night shows returning to their old place as the heart of American comedy. Americans seeking comic relief, rather than partisan affirmation, will look elsewhere. ■

Economic & financial indicators

| | Gross domestic product | | | | Consumer prices | | | Unemployment | | | Current-account balance | | Budget balance | | Interest rates | | Currency units | |
|----------------|------------------------|----------|-------|------|----------------------|-------|-------|--------------|--------|------|-------------------------|--|-----------------|------|-------------------|--------------|----------------|-------------|
| | % change on year ago | | | | % change on year ago | | | rate | | | balance | | balance | | 10-yr gov't bonds | | change on | |
| | latest | quarter* | 2024† | | latest | 2024† | | % | | | % of GDP, 2024‡ | | % of GDP, 2024‡ | | latest,% | year ago, bp | per \$ | % change |
| | | | | | | | | | | | | | | | | | May 8th | on year ago |
| United States | 3.0 | Q1 | 1.6 | 2.2 | 3.5 | Mar | 3.0 | 3.9 | Apr | -3.0 | -6.3 | | 4.5 | 96.0 | - | | | |
| China | 5.3 | Q1 | 6.6 | 4.7 | 0.1 | Mar | 1.0 | 5.2 | Mar*§ | 1.1 | -4.5 | | 2.1 | ⁱⁱ | -53.0 | 7.23 | -4.3 | |
| Japan | 1.2 | Q4 | 0.4 | 1.3 | 2.7 | Mar | 2.3 | 2.6 | Mar | 2.9 | -4.8 | | 0.9 | | 47.0 | 156 | -13.3 | |
| Britain | -0.2 | Q4 | -1.2 | 0.4 | 3.2 | Mar | 2.6 | 4.2 | Jan** | -2.8 | -4.2 | | 4.2 | | 53.0 | 0.80 | -1.2 | |
| Canada | 0.9 | Q4 | 1.0 | 1.9 | 2.9 | Mar | 2.5 | 6.1 | Mar | -0.4 | -0.6 | | 3.6 | | 65.0 | 1.37 | -2.2 | |
| Euro area | 0.4 | Q1 | 1.3 | 0.9 | 2.4 | Apr | 2.4 | 6.5 | Mar | 2.8 | -3.2 | | 2.5 | | 13.0 | 0.93 | -2.1 | |
| Austria | -1.7 | Q4 | 0.2‡ | 0.5 | 3.5 | Apr | 3.5 | 4.9 | Mar | 2.4 | -2.4 | | 3.0 | | -4.0 | 0.93 | -2.1 | |
| Belgium | 1.3 | Q1 | 1.2 | 1.1 | 4.9 | Apr | 3.0 | 5.5 | Mar | -0.1 | -4.4 | | 3.0 | | -6.0 | 0.93 | -2.1 | |
| France | 1.1 | Q1 | 0.9 | 0.9 | 2.4 | Apr | 2.7 | 7.3 | Mar | -0.7 | -4.9 | | 3.0 | | 10.0 | 0.93 | -2.1 | |
| Germany | -0.2 | Q1 | 0.9 | 0.2 | 2.4 | Apr | 2.1 | 3.2 | Mar | 6.5 | -1.5 | | 2.5 | | 13.0 | 0.93 | -2.1 | |
| Greece | 1.1 | Q4 | 0.6 | 2.8 | 3.4 | Mar | 3.2 | 10.2 | Mar | -5.5 | -1.4 | | 3.5 | | -57.0 | 0.93 | -2.1 | |
| Italy | 0.6 | Q1 | 1.2 | 1.0 | 1.0 | Apr | 1.6 | 7.2 | Mar | 1.1 | -5.4 | | 3.8 | | -44.0 | 0.93 | -2.1 | |
| Netherlands | -0.4 | Q4 | 1.4 | 1.0 | 2.6 | Apr | 2.8 | 3.6 | Mar | 8.9 | -2.4 | | 2.8 | | 8.0 | 0.93 | -2.1 | |
| Spain | 2.4 | Q1 | 2.9 | 1.7 | 3.4 | Apr | 2.9 | 11.7 | Mar | 1.8 | -3.5 | | 3.2 | | -7.0 | 0.93 | -2.1 | |
| Czech Republic | 0.2 | Q4 | 2.0 | 1.2 | 2.0 | Mar | 2.1 | 3.0 | Mar*‡ | -0.5 | -2.5 | | 4.0 | | -54.0 | 23.3 | -8.6 | |
| Denmark | 3.5 | Q4 | 10.8 | 1.4 | 0.9 | Mar | 1.7 | 2.9 | Mar | 9.5 | 1.6 | | 2.5 | | -13.0 | 6.94 | -2.6 | |
| Norway | 0.5 | Q4 | 6.2 | 1.0 | 3.9 | Mar | 2.6 | 3.9 | Feb** | 14.4 | 12.0 | | 3.6 | | 49.0 | 10.9 | -3.7 | |
| Poland | 1.0 | Q4 | nil | 2.9 | 2.4 | Apr | 3.8 | 5.1 | Aprⁱ | 0.2 | -5.2 | | 5.6 | | -23.0 | 4.00 | 3.5 | |
| Russia | 4.9 | Q4 | na | 1.9 | 7.7 | Mar | 6.4 | 2.7 | Marⁱ | 2.5 | -1.8 | | 13.7 | | 282 | 92.0 | -15.8 | |
| Sweden | -0.9 | Q1 | -0.4 | 0.3 | 4.1 | Mar | 2.4 | 9.2 | Marⁱ | 5.6 | -0.9 | | 2.3 | | -1.0 | 10.9 | -6.7 | |
| Switzerland | 0.6 | Q4 | 1.2 | 1.0 | 1.4 | Apr | 1.4 | 2.3 | Apr | 6.3 | -0.3 | | 0.7 | | -40.0 | 0.91 | -2.2 | |
| Turkey | 4.0 | Q4 | 3.9 | 3.1 | 69.8 | Apr | 52.4 | 9.2 | Febⁱ | -3.0 | -4.6 | | 26.5 | | 1,413 | 32.2 | -39.5 | |
| Australia | 1.5 | Q4 | 1.0 | 2.0 | 3.6 | Q1 | 3.2 | 3.8 | Mar | 1.2 | -1.0 | | 4.5 | | 116 | 1.52 | -3.3 | |
| Hong Kong | 4.3 | Q4 | 1.8 | 3.2 | 2.0 | Mar | 2.2 | 3.0 | Mar** | 6.3 | -1.4 | | 3.8 | | 66.0 | 7.82 | 0.4 | |
| India | 8.4 | Q4 | 8.0 | 6.6 | 4.9 | Mar | 4.9 | 8.1 | Apr | -1.1 | -5.3 | | 7.1 | | 9.0 | 83.5 | -2.1 | |
| Indonesia | 5.1 | Q1 | na | 5.1 | 3.0 | Apr | 3.2 | 4.8 | Q1ⁱ | -0.2 | -2.4 | | 7.0 | | 51.0 | 16,045 | -8.4 | |
| Malaysia | 3.9 | Q1 | na | 4.4 | 1.8 | Mar | 2.5 | 3.3 | Febⁱ | 1.9 | -4.4 | | 3.9 | | 10.0 | 4.74 | -6.3 | |
| Pakistan | nil | 2023** | na | 1.7 | 17.3 | Apr | 19.7 | 6.3 | 2021 | -3.0 | -7.0 | | 14.2 | ††† | -93.0 | 278 | 2.1 | |
| Philippines | 5.7 | Q1 | 5.3 | 5.7 | 3.8 | Apr | 2.9 | 4.5 | Q1ⁱ | -1.3 | -6.1 | | 6.9 | | 96.0 | 57.4 | -3.7 | |
| Singapore | 2.7 | Q1 | 0.2 | 2.4 | 2.7 | Mar | 3.1 | 2.1 | Q1 | 18.5 | 0.1 | | 3.3 | | 56.0 | 1.36 | -2.2 | |
| South Korea | 3.2 | Q1 | 5.2 | 2.7 | 2.9 | Apr | 2.6 | 3.0 | Marⁱ | 2.5 | -1.4 | | 3.5 | | 22.0 | 1,361 | -2.9 | |
| Taiwan | 6.5 | Q1 | 1.1 | 3.3 | 2.0 | Apr | 2.0 | 3.4 | Mar | 14.4 | 0.1 | | 1.7 | | 52.0 | 32.4 | -5.4 | |
| Thailand | 1.7 | Q4 | -2.3 | 3.2 | 0.2 | Apr | 1.2 | 1.0 | Marⁱ | 3.0 | -3.5 | | 2.8 | | 25.0 | 37.0 | -8.6 | |
| Argentina | -1.4 | Q4 | -7.3 | -3.0 | 288 | Mar | 248.9 | 5.7 | Q4ⁱ | 0.1 | -1.2 | | na | na | na | 882 | -74.2 | |
| Brazil | 2.1 | Q4 | -0.1 | 2.1 | 3.9 | Mar | 4.0 | 7.9 | Marⁱ** | -1.7 | -7.3 | | 11.6 | | -73.0 | 5.08 | -2.4 | |
| Chile | 0.4 | Q4 | 0.4 | 2.8 | 3.5 | Apr | 3.5 | 8.7 | Marⁱ** | -3.5 | -2.5 | | 5.9 | | 49.0 | 937 | -15.5 | |
| Colombia | 0.3 | Q4 | 0.1 | 1.2 | 7.2 | Apr | 5.8 | 11.3 | Marⁱ | -3.1 | -5.1 | | 10.3 | | -101 | 3,904 | 14.8 | |
| Mexico | 1.6 | Q1 | 0.8 | 2.3 | 4.4 | Mar | 4.2 | 2.7 | Mar | -0.6 | -4.7 | | 9.6 | | 81.0 | 16.9 | 5.3 | |
| Peru | -0.4 | Q4 | 0.9 | 2.4 | 2.4 | Apr | 2.8 | 7.0 | Marⁱ | -0.5 | -3.0 | | 7.1 | | -34.0 | 3.72 | -0.3 | |
| Egypt | 2.3 | Q4 | na | 2.6 | 33.4 | Mar | 31.8 | 6.9 | Q4ⁱ | -3.4 | -11.0 | | na | na | na | 47.6 | -35.0 | |
| Israel | -4.7 | Q4 | -21.0 | 1.9 | 2.7 | Mar | 2.9 | 3.3 | Mar | 5.3 | -6.6 | | 4.6 | | 91.0 | 3.71 | -2.2 | |
| Saudi Arabia | -0.8 | 2023 | na | 2.0 | 1.6 | Mar | 2.1 | 4.4 | Q4 | 0.9 | -1.3 | | na | na | na | 3.75 | nil | |
| South Africa | 1.2 | Q4 | 0.2 | 1.6 | 5.3 | Mar | 4.8 | 32.1 | Q4ⁱ | -2.0 | -5.2 | | 10.5 | | 36.0 | 18.6 | -1.6 | |

Source: Haver Analytics. *% change on previous quarter, annual rate. †The Economist Intelligence Unit estimate/forecast. ⁱNot seasonally adjusted. †New series. **Year ending June. ††Latest 3 months. †††3-month moving average. ⁱⁱ5-year yield. †††Dollar-denominated bonds. Note: Euro area consumer prices are harmonised.

Markets

| In local currency | Index | % change on: | |
|-------------------------|----------|--------------|----------|
| | | one | Dec 29th |
| | May 8th | week | 2023 |
| United States S&P 500 | 5,187.7 | 3.4 | 8.8 |
| United States NAScomp | 16,302.8 | 4.5 | 8.6 |
| China Shanghai Comp | 3,128.5 | 0.8 | 5.2 |
| China Shenzhen Comp | 1,772.8 | 1.0 | -3.5 |
| Japan Nikkei 225 | 38,202.4 | -0.2 | 14.2 |
| Japan Topix | 2,706.4 | -0.8 | 14.4 |
| Britain FTSE 100 | 8,354.1 | 2.9 | 8.0 |
| Canada S&P/TSX | 22,259.2 | 2.4 | 6.2 |
| Euro area EURO STOXX 50 | 5,038.2 | 2.4 | 11.4 |
| France CAC 40 | 8,131.4 | 1.8 | 7.8 |
| Germany DAX* | 18,498.4 | 3.2 | 10.4 |
| Italy FTSE/MIB | 34,151.4 | 1.2 | 12.5 |
| Netherlands AEX | 899.6 | 2.4 | 14.3 |
| Spain IBEX 35 | 11,153.0 | 2.8 | 10.4 |
| Poland WIG | 86,888.7 | 2.7 | 10.7 |
| Russia RTS, \$ terms | 1,176.3 | 0.1 | 8.6 |
| Switzerland SMI | 11,602.2 | 3.0 | 4.2 |
| Turkey BIST | 10,247.8 | 2.0 | 37.2 |
| Australia All Ord. | 8,076.7 | 3.1 | 3.2 |
| Hong Kong Hang Seng | 18,313.9 | 3.1 | 7.4 |
| India BSE | 73,466.4 | -1.4 | 1.7 |
| Indonesia IDX | 7,088.8 | -2.0 | -2.5 |
| Malaysia KLSE | 1,604.8 | 1.8 | 10.3 |

| | Index | % change on: | |
|-----------------------|-------------|--------------|----------|
| | | one | Dec 29th |
| | May 8th | week | 2023 |
| Pakistan KSE | 72,601.8 | 2.1 | 16.3 |
| Singapore STI | 3,264.5 | -0.9 | 0.7 |
| South Korea KOSPI | 2,745.1 | 2.0 | 3.4 |
| Taiwan TWI | 20,700.5 | 1.5 | 15.4 |
| Thailand SET | 1,373.3 | 0.4 | -3.0 |
| Argentina MERV | 1,450,499.0 | 9.6 | 56.0 |
| Brazil BVSP* | 129,480.9 | 2.8 | -3.5 |
| Mexico IPC | 57,081.0 | 0.6 | -0.5 |
| Egypt EGX 30 | 25,988.9 | 2.8 | 4.4 |
| Israel TA-125 | 2,006.8 | 2.6 | 6.3 |
| Saudi Arabia Tadawul | 12,460.1 | 0.9 | 4.1 |
| South Africa JSE AS | 77,177.4 | 1.4 | 0.4 |
| World, dev'd MSCI | 3,395.6 | 3.1 | 7.1 |
| Emerging markets MSCI | 1,066.6 | 2.0 | 4.2 |

| US corporate bonds, spread over Treasuries | | |
|--|--------|----------|
| | latest | Dec 29th |
| Basis points | | 2023 |
| Investment grade | 101 | 154 |
| High-yield | 347 | 502 |

Sources: LSEG Workspace; Standard & Poor's Global Fixed Income Research. *Total return index.

Commodities

| The Economist commodity-price index | | | | % change on |
|-------------------------------------|----------|----------|-------|-------------|
| 2020=100 | Apr 30th | May 7th* | month | year |
| Dollar Index | | | | |
| All Items | 136.4 | 137.0 | 2.5 | 6.6 |
| Food | 144.4 | 145.3 | -1.0 | 2.6 |
| Industrials | | | | |
| All | 129.8 | 130.2 | 6.1 | 10.6 |
| Non-food agriculturals | 133.8 | 133.8 | -3.4 | 15.8 |
| Metals | 128.7 | 129.2 | 8.9 | 9.2 |
| Sterling Index | | | | |
| All items | 140.0 | 140.2 | 3.5 | 7.1 |
| Euro Index | | | | |
| All items | 145.7 | 145.2 | 3.3 | 8.4 |
| Gold | | | | |
| \$ per oz | 2,296.5 | 2,316.6 | -1.3 | 14.3 |
| Brent | | | | |
| \$ per barrel | 87.9 | 83.2 | -7.5 | 7.3 |

Sources: Bloomberg; CME Group; Fastmarkets; FT; LSEG Workspace; LME; NZ Wool Services; S&P Global Commodity Insights; Thompson Lloyd & Ewart; Urner Barry; WSJ. *Provisional.

For historical indicators data, visit [economist.com/economic-and-financial-indicators](https://www.economist.com/economic-and-financial-indicators)

OBITUARY

Anne Innis Dagg

The Canadian zoologist who devoted her life to giraffes died on April 1st, aged 91



WHEN THE bizarre creature first appeared in Florence, in 1487 at the court of the Medici, it caused a sensation. Bending down its long, long neck, it took food from children, and was fed with fruit by noblewomen from second-storey windows. In 1827, in Paris, a female giraffe presented to Charles X stirred an outbreak of giraffe-mania, with high-piled hairstyles, giraffe-spotted wallpaper and years on, some say, the design of the Eiffel Tower.

What happened to Anne Innis Dagg, when she was two and visiting the Brookfield Zoo in Chicago, was just as momentous in its way. Being very small, and the giraffes very tall, she was naturally amazed. But when something suddenly frightened them, and they galloped with a flurry of necks and legs across their enclosure, that was beautiful.

From then on, their lives were hers. Her toys were giraffes, her drawings were of giraffes, and she resolved to know everything about them. But information was scarce, and not only in her native Toronto. It seemed she would have to write the necessary books herself. At university she read biology, then taught zoology, to get as close as she could. And her devotion never wavered. When she went back to the Brookfield Zoo, as a young woman, the stare of a lordly male with huge brown eyes reduced her to reverence. In her 80s, when a male called Buddy bowed low to slobber gently on her shirt, she embraced him.

Zoos were not good enough, of course. Why study a set of giraffe incisors, rather than watch how they were used to strip leaves from thorn trees in the wild? Why pore over a leg bone, rather than follow the way live legs leapt through a thicket? Their movements, so graceful with such bulk to shift, intrigued her particularly. Out in the lowveld of southern Africa she could watch whole crowds in motion, like a ballet.

So she must go. Even Ian Dagg, the man she planned to marry, would have to wait until she had kept long company with wild giraffes. But in the 1950s young women did not do solo field work. It was improper, or the snakes were too dangerous, or some nonsense. Thirteen African governments turned her down, and the kind farmer who eventually welcomed her, Alexander Matthew, did so only after she had written masquerading as a man. When

she reached his ranch in eastern Transvaal, having walked the last few miles through the bush after her Ford Prefect had broken down, he realised he had a serious researcher on his hands.

As for her, she was in heaven. The first wild giraffe she saw exceeded expectations, half-kneeling to drink for seconds from a water hole before swinging up her head and rising, magnificent. Day after happy day she was up at 5am to drive out and observe for ten hours from her car. Any closer, and the giraffes would have cantered away; but Mr Matthew had lent her his field glasses and his 16mm cine camera. As for snakes, and biting ants, and drunken men trying it on, she could well look out for herself.

As before, it was the gait of giraffes that transfixed her. They ran so smoothly, she discovered, because the two left or right legs moved in unison, to prevent the hind leg hitting the front one. More exciting still, their necks moved in close correlation with their legs, giving that wonderful flow-effect. But everything was done with delicate adaptability to the arid land they lived in.

Some aspects of their lives surprised her. They did not form a close-knit herd. They had no leader and (save females with their young) no nuclear families, but were a loose set of individuals who communicated sparingly. Her African hosts thought them stupid, but they were clever enough to jump fences, rather than break through, and to drink from cattle troughs, which was easier.

The most curious thing was how the males behaved. They sparred so much that their skulls had extra deposits of bone. Yet it would usually end lovingly, often with attempts to mate. Homosexual behaviour in animals became another study, but she still felt too embarrassed to tell her host about it. She might drive hundreds of miles alone and wear men's slacks, but to most people she met she was a "girl", even in her 20s, innocent of such things.

She was presumed innocent, or uncaring, about apartheid too. She tried to befriend the black ranch workers, only to be told by the whites not to bother: they were illiterate, thieving and clumsy. Her angry ripostes were met with laughter at how naive she was.

She left Africa, after a year, with two burning ambitions: to write up, and teach, everything she had learned about giraffes, and to fight inequality when she found it. Where she now found it, infuriatingly, was in her own life. Marriage was fine in itself, once she had paid for the ring to dispel any notion that Ian had "bought" her. It became a problem because wives and mothers were meant to be only that. The papers she had produced, while cooking and pushing prams, counted for nothing. Academia was now not her place. All the Canadian universities where she sought tenure, Guelph, Wilfrid Laurier and Waterloo, rejected her for less qualified men. Like the Romans, who were bothered that the giraffe Caesar brought home was two things, not one—hence *camelopardis*, camel-leopard—they viewed her as a freak.

The first full-length scientific study of her favourite creature, "The Giraffe: Its Biology, Behaviour, and Ecology" (1976) was therefore written when she was unemployed. Many other studies and papers followed. She found lesser university posts, but without tenure she remained, she felt, a non-person. It took a zookeepers' conference in 2010 and a film, "The Woman who Loves Giraffes" (2018) to restore her to general notice. Guelph apologised, which was nice, but she mourned the wasted years.

Making the film took her back to Africa. There she watched her beloved giraffes running free again. No, they didn't stick together like a herd. Not, at least, in the way dominant male humans did, at the top of universities in the bad old days. ■

Planning a New Career Challenge?



Unique Access to Confidential Opportunities

InterExec is the global leader in assisting Top Executives to access £200k to £2m+ unadvertised vacancies worldwide.

We act discreetly through our 15,000 strong Headhunter network.

london@interexec.net www.interexec.net +44 (0)20 7256 5085

EST 1976

InterExec

UNIQUE NETWORK ♦ OUTSTANDING TALENT

BUSINESS & PERSONAL



STRONGKEY

**SECURING SENSITIVE
DATA SINCE 2001**

GETSECURE@STRONGKEY.COM

Readers are recommended

to make appropriate enquiries and take appropriate advice before sending money, incurring any expense or entering into a binding commitment in relation to an advertisement.

The Economist Newspaper Limited shall not be liable to any person for loss or damage incurred or suffered as a result of his/her accepting or offering to accept an invitation contained in any advertisement published in *The Economist*.

The Economist

To advertise within the classified section, contact:

UK/Europe

Alexandra Helmer-Jensen
alexandrajensen@economist.com

North America

Richard Dexter
richarddexter@economist.com

Asia

Chris Phang
chrisphang@economist.com

Middle East & Africa

Philip Wrigley
philipwrigley@economist.com

PROPERTY



Svalbard, High Arctic

14,830 acres of pristine Arctic land located inside a fjord | 5km of shoreline | The Reinholmer Island Mountains | Glacier | Valleys | Flatland & an abundance of wildlife | Flights from Oslo to Longyearbyen

A unique opportunity to acquire the Company holding the last remaining privately owned land on Svalbard with significant environmental, scientific and economic importance.

Scan here or visit: www.kulspids.com



Knight Frank London
will.matthews@knightfrank.com
+44 (0)20 7861 1440

ZFZ (Zeller Floyd Zadkovich LLP)
jonathan.webb@zellerfloydzad.com
+44 (0) 208 017 2517

King & Spalding LLP
tspulak@kslaw.com
+1 202 255 6942

knightfrank.co.uk

Your partners in property

THERE IS ETERNITY IN EVERY BLANCPAIN

The spirit to preserve.



"Creation"
Wildlife Photographer
of the Year 2021
Grand Title winner
© Laurent Ballesta



Fifty Fathoms
Collection



A Fifty Fathoms is for eternity.

Launched in 1953, the Fifty Fathoms is the first modern diver's watch. Created by a diver and chosen by pioneers, it played a vital role in the development of scuba diving. It is the catalyst of our commitment to ocean conservation.

JB
1735
BLANCPAIN
MANUFACTURE DE HAUTE HORLOGERIE